SERVICEANLEITUNG

BONDSTEC

VIDEO-RECORDER

BT-50

BAUGLEICH MIT YOKO VCR-30DAP
VCR-30DAP GAA/GBA, VCR-50DAP
GAB, YK-100

TEC

Technik zum Anfassen

SERVICE-UNTERLAGEN

TEC

SERVICE-Nr.: 3850

INTRODUCTION

This service manual contains technical information which will allow service technicians to understand and service the PAL VHS Video Cassette Recorder.

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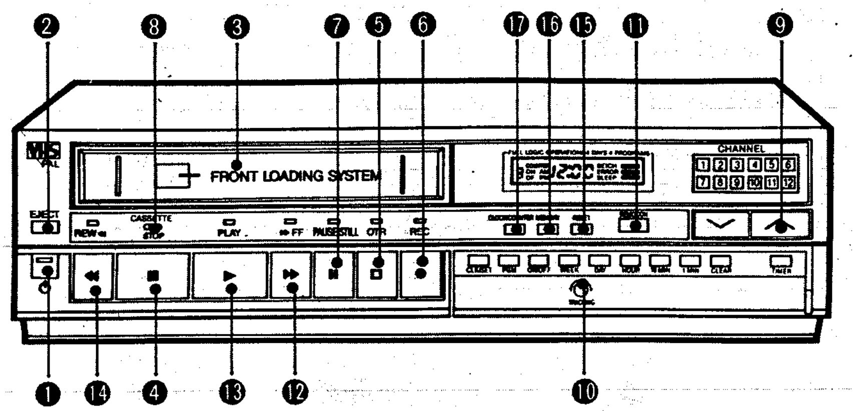
SECTION 1. GENERAL

1-1 IDENTIFICATION AND OPERATION OF CONTROLS

(30DAP (I), 30DAP GBA, 50DAP GAB)



1. **POWER Switch**
   Turns VCR power on and off.

2. **EJECT Button**
   Use to remove the cassette from the cassette compartment. (Only when power is on)

3. **Cassette Compartment**
   When the cassette is inserted in this compartment, the cassette will automatically be taken inside ready for operation. The cassette indicator lamp will light.

4. **STOP Button**
   Push to stop. All operating modes are cancelled.

5. **OTR Button**
   One touch record facility enables very simple timed recordings to be made without the need to execute the full programming sequence.

6. **RECORD Button**
   Push this button to record: If the safety tab has been removed from the cassette, it will not be posible to record, thereby preventing your recordings from being accidentally erased.

7. **PAUSE/STILL Button**
   In the recording mode, you can stop the operation of the recorder temporarily. In the playback mode, a picture will appear in the STILL mode. The still mode is released automatically after 5 minutes. And the recorder will return to the play mode.

8. **Cassette Indicator Lamp.**
   Indicates when a cassette is loaded.

9. **Channel Selector Buttons**
   Use to select the channels you wish to view or record.

10. **REMOTE Sensor**
    Point Remote controller to here for operation.

11. **TRACKING Knob**
    Used when playing cassette recorded on other machines using the VHS system. Adjust this control to minimize black streaks across the TV picture during playback. Set the control in its centre position when recording and during subsequent playback of cassettes recorded on this VCR.

12. **FF Button**
    The FF Button serves a dual purpose. Push to fast forward the tape. When this button is pushed during the playback mode, the picture moves quickly forward and you can search for the desired part of the program.

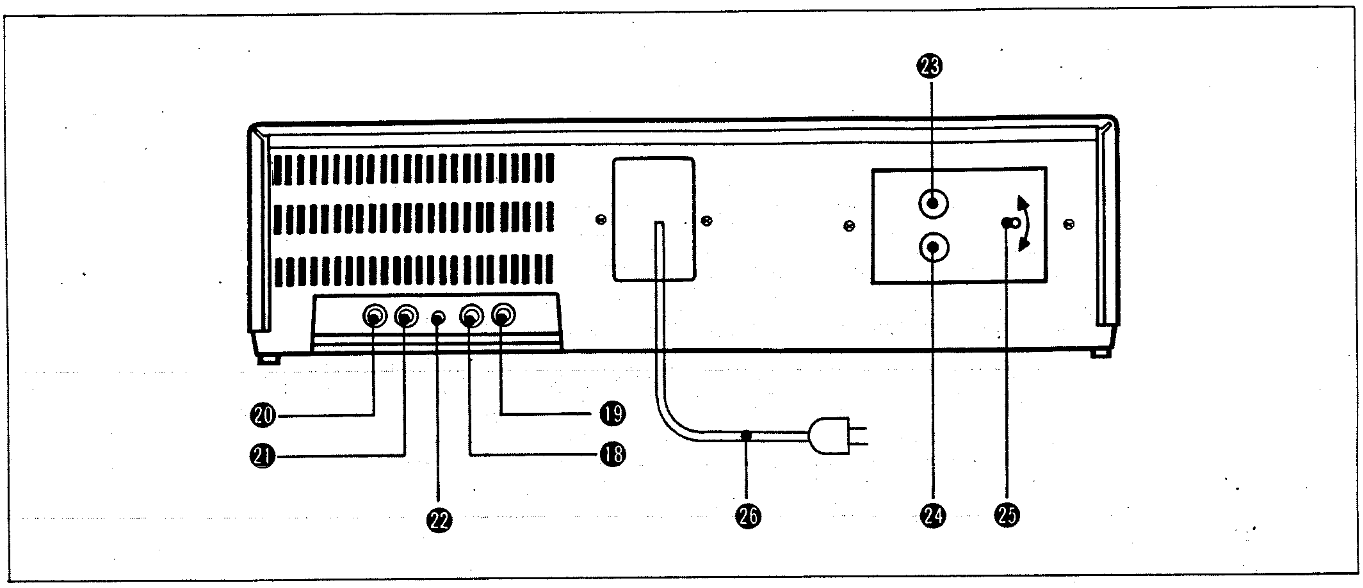
13. **PLAY Button**
    Push to playback a previously recorded tape.

14. **REW Button**
    The REW Button serves a dual purpose. Push for rewinding of the tape. When this button is pushed during the playback mode, the picture moves quickly backwards and you can search for the desired part of the program.

15. **Reset Button**
    Used to set the tape counter to the "OOOO" position.

16. **MEMORY Button**
    When the memory is set, "M" lights up to the left of the counter number, and makes your VCR STOP at "OOOO" during FF or REW function.

17. **COUNTER/CLOCK Button**
    Used to select the display function.



18. VIDEO OUT Socket
Provides a video from the recorder for use by other equipment.

19. AUDIO OUT Socket
An audio signal is available for use by other equipment.

20. VIDEO IN Socket
Used for conncting a video camera or other video equipment.
Connecting a plug into this jack cuts off the picture from the tune, and records the video signal connected into the "VIDEO IN" socket.
Disconnecting the plug automatically resumes the picture from the tuner.

21. AUDIO IN Socket
Used for connecting an audio input from other equipment. Connecting a plug into this jack cuts off the audio signal coming from the tuner and records the audio signal connected to this "AUDIO IN" Socket Disconnecting the plug automatically resumes the audio signal from the tuner.

22. CAMERA PAUSE Socket
Used when connecting VIDEO CAMERA using AC adaptor. To enable remote STOP/START from camera.

23. ANT IN Socket
Connect Aerial to this socket.

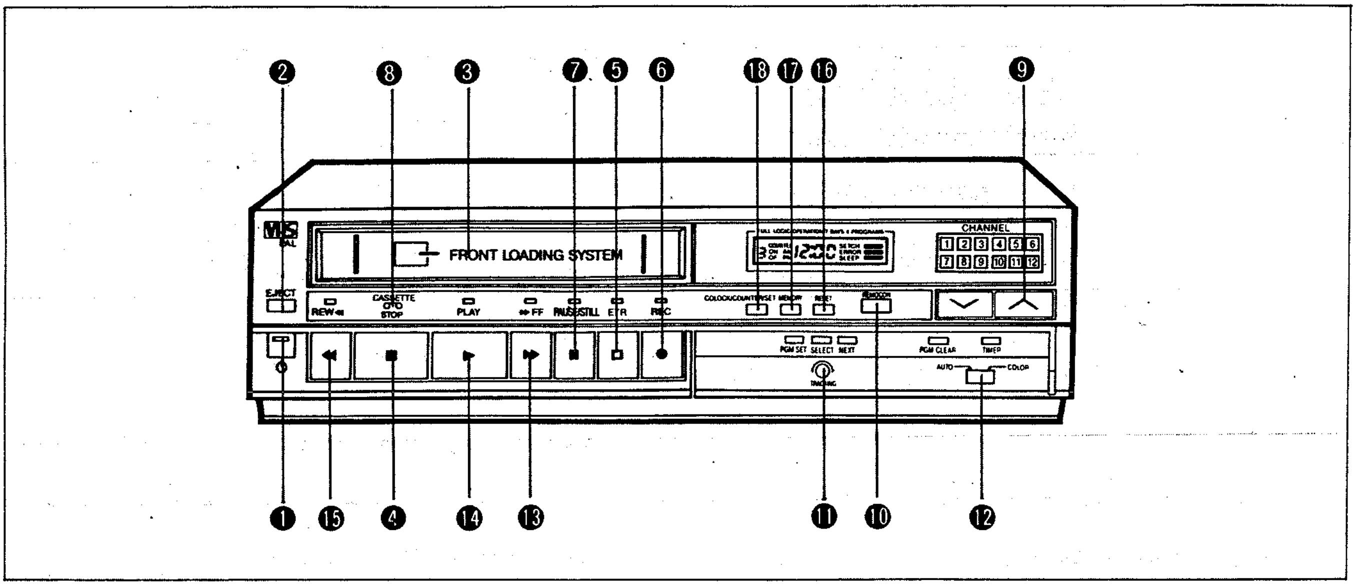
24. RF OUT Socket
Connect this to the AERIAL SOCKET of the TV, using the coxial cable provide.

25. RF Channel Control
For use only by service engineer.

26. Power Cord.
Connect this cord into the AC wall socket 240V 50Hz AC only.

1-2 IDENTIFICATION AND OPERATION OF CONTROLS

(30DAP GAA)



1. **POWER Switch**
   Turns VCR power on and off.
   Operate this switch with an internal of more than 2 seconds.

2. **EJECT Button**
   Use to remove the cassette from the cassette compartment. (Only when power is on.)

3. **Cassette Compartment**
   When the cassette is inserted in this compartment, the cassette will automatically be ready for operation. The cassette indicator lamp will light.

4. **STOP Button**
   Push to stop. All operating modes are cancelled.

5. **ETR Button**
   Easy timer reocrd facility enables very simple timed recordings to be made without the need to execute the full programming sequence.
   After setting the recording time by ETR button, Press TIMER button to start recording.

6. **RECord Button**
   Push this button to record. If the safety tab has been removed from the cassette, it will not be possible to record, thereby preventing your recording from being accidentally erased.

7. **PAUSE/STILL Button**
   In the recording mode, you can stop the operation of the recorder temporarily. In the playback mode, a picture will appear in the STILL mode. The still mode is released automatically after 5 minutes. And the recorder will return to the play mode.

8. **Cassette Indicator Lamp**
   When the cassette is correctly set in the VCR for the ready of operation, this cassette indicator lamp will light.

9. **Channel Selector Buttons**
   Use to select the channels you wish to view or record.

10. **REMOTE Sensor**
    Point Remote controller to here for operation.

11. **TRACKING Knob**
    Used when playing cassettes recorded on other machines using the VHS system. Adjust this control to minimuze black streaks across the TV picture during playback. Set the control in its center position when recording and during subsequent playback of cassettes recorded on this VCR.

12. **COLOUR MODE Switch**
    For normal recording and playback operation, this switch must be in the AUTO position. Only if the colour reception of a station is particularity weak, setting this switch to the COLOUR position can improve the recording quality.

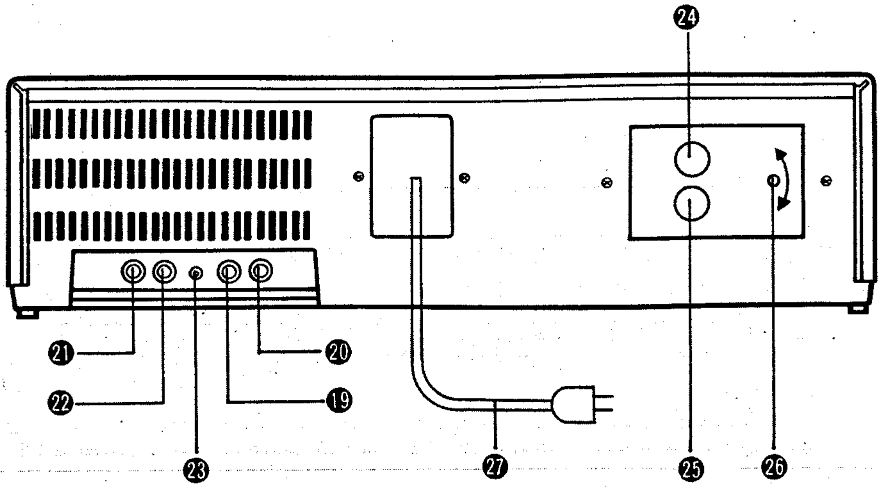
13. **FF Button**
    The FF Button serves a dual purpose. Push for fast forward the tape. When this button is pushed during the playback mode, the picture moves quickly forward and you can search for the desired part of the program.

14. **PLAY Button**
    Push for playback recorded tape.

15. **REW Button**
    The REW Button serves a dual purpose. Push for rewinding of the tape. When this button is pushed during the playback mode, the picture moves quickly backward and you can search for the desired part of the program.

16. **Reset Button**
    Used to set the tape counter to the "OOOO" position.

17. **MEMORY Button**
    Used to memory "OOOO" of the counter. When the memory is set, "M" lights up at the head of the counter number, and makes you VCR STOP at "OOOO" during FF or REW function.



18. CLOCK/COUNTER/SET
Used to select the display contents. Counter number and clock is displayed cyclicly when this button is pressed.

19. VIDEO OUT Terminal
Previdės a video signal from the recorder for use by other equipment.

20. AUDIO OUT Terminal
An audio signal is available for use by other equipment.

21. VIDEO IN Terminal
Used for connecting a video camera or other video equipment.
Connecting a plug into this jack cuts off the picture from the tuner and records the video signal connected into the "VIDEO IN" Jack.
Disconnecting the plug automatically resumes the picture from the tuner.

22. AUDIO IN Terminal
Used for connecting an audio input from other equipment. Connecting a plug into this jack cuts off the audio signal coming from the tuner and records the audio signal connected to this "AUDIO IN" Jack Disconnecting the plug automatically resumes the audio signal from the tuner.

23. CAMERA PAUSE Terminal
Used when connecting VIDEO CAMERA using AC adaptor.

24. ANT IN Terminal
Connect antenna to this terminal.

25. RF OUT Terminal
Connect the ANTENNA terminal of the TV to this terminal, using the coxial cable provided.

26. RF Channel Control
Adjust CH32 ~ 40.

27. Power Cord
Connect this cord into the AC output (AC220V).

SECTION 2. ELECTRICAL ADJUSTMENTS

2-1. ALIGNMENT AND ELECTRICAL ADJUSTMENT

For these adjustments, use the equipment mentioned below and proceed by using the alignment tape and video signal

Instruments and Tools Required

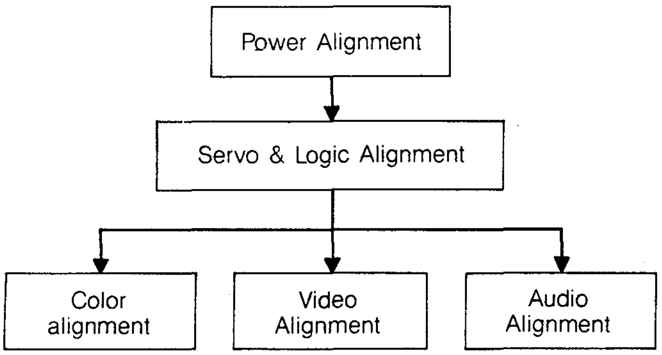
1. Color TV receiver
2. Oscilioscope having 10 MHz or more bandwidth
3. Color-bar generator
4. Frequency counter
5. VTVM
6. VOM (20 kΩ/V)
7. Audio osciliator
8. Audio attenuator

Signal Level and Input and Output Impedance Requirement

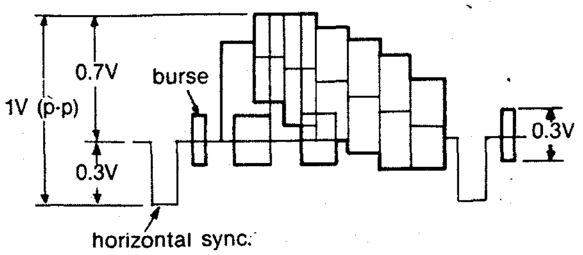
1. Video input : Negative sync, 1 Vp-p standard composite video signal, 75Ω.
2. Video output : Same as above.
3. Audio input : Line −10dB 50kΩ.
4. Audio output : −5dB, 10kΩ or less.

Adjustments Sequence

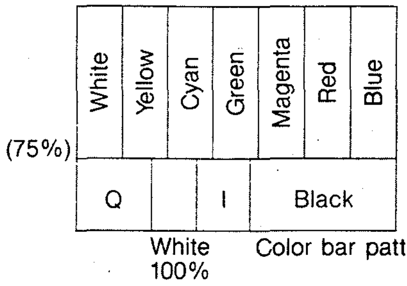
The VCR should be adjusted in the sequence shown below.


Power Alignment
Servo & Logic Alignment
Color alignment
Video Alignment
Audio Alignment

The sitable output waveform of the color-bar signal generator is shown below.

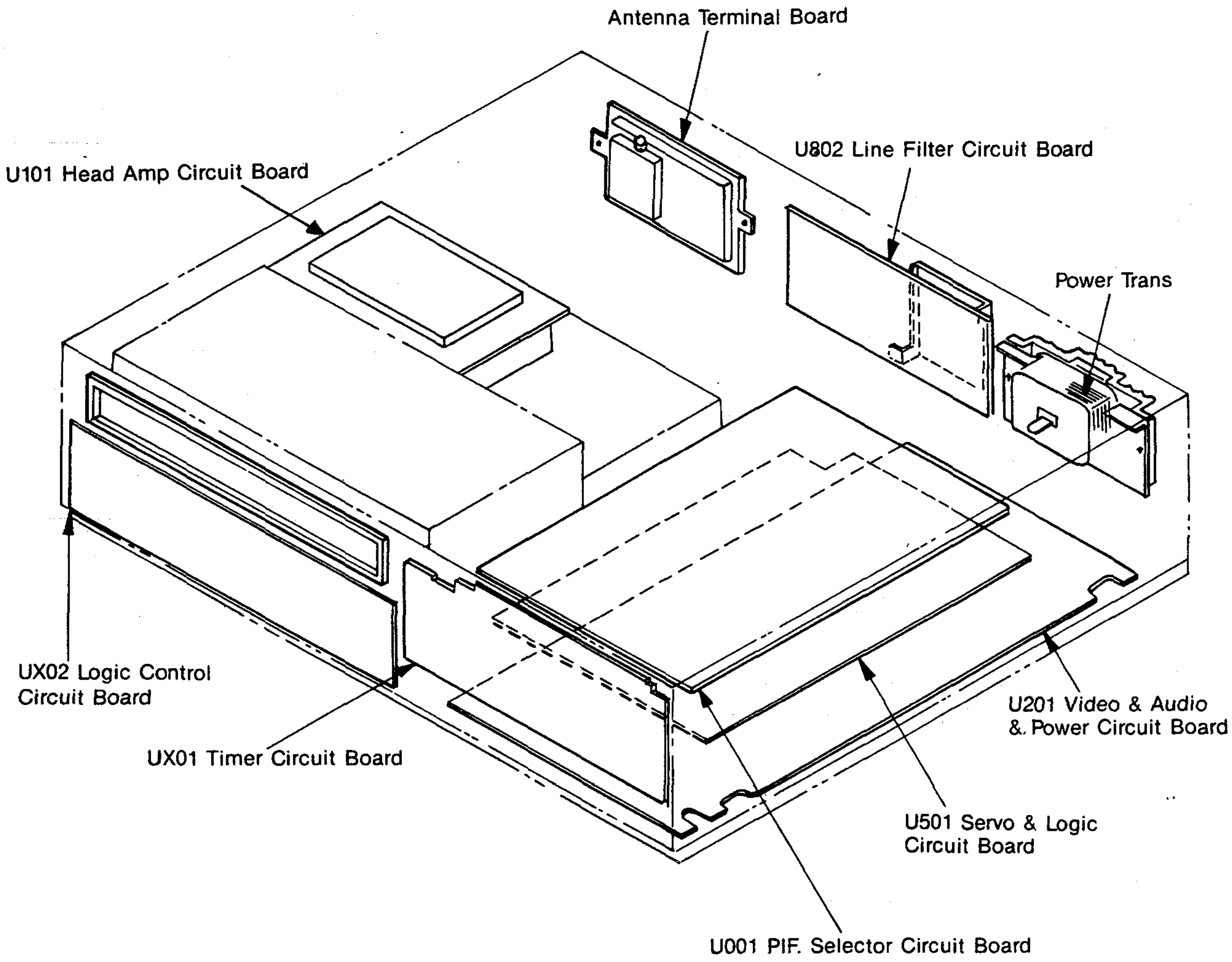

0.7V
burse
1V (p-p)
0.3V
0.3V
horizontal sync.

color bar signal waveform


White
Yellow
Cyan
Green
Magenta
Red
Blue
(75%)
Q
I
Black
White
100%

Color bar pattern

2-2. PW BOARD LOCATION


Antenna Terminal Board
U802 Line Filter Circuit Board
U101 Head Amp Circuit Board
Power Trans
UX02 Logic Control Circuit Board
UX01 Timer Circuit Board
U201 Video & Audio &. Power Circuit Board
U501 Servo & Logic Circuit Board
U001 PIF. Selector Circuit Board

2-3. ELECTRICAL ADJUSTMENT

2-3-1. POWER SUPPLY CIRCUIT ADJUSTMENT METHOD.

+12V ADJUSTMENT

Adjustment Location	Measuring Point	Measuring Equipment	Conditions of Adjustment
R 810	TP 801	VTVM	STOP MODE

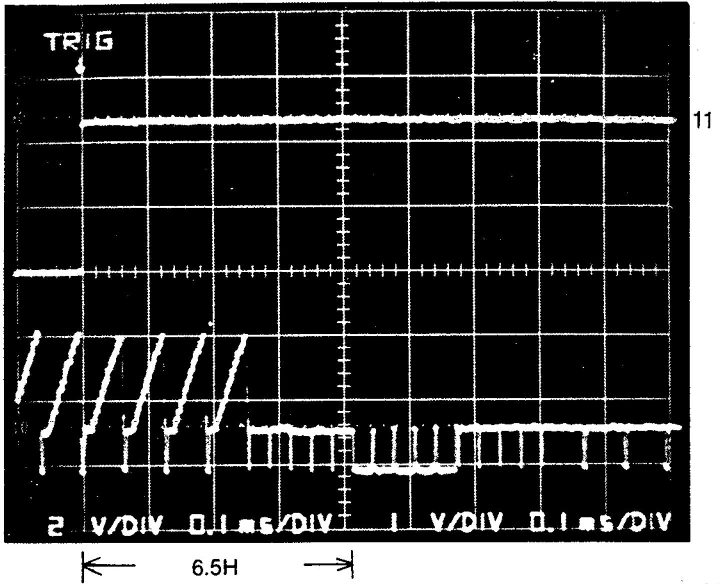
1) Turn power on.
2) Adjust R810 until the VTVM reads 12±0.1V.

2-3-2. SERVO-LOGIC CIRCUIT ADJUSTMENT METHOD

1. VIDEO HEAD SWITCHING POSITION

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 511 R 512	TP 204 P 506 2	Oscilloscope	Play	DP-2 (Stair Step)

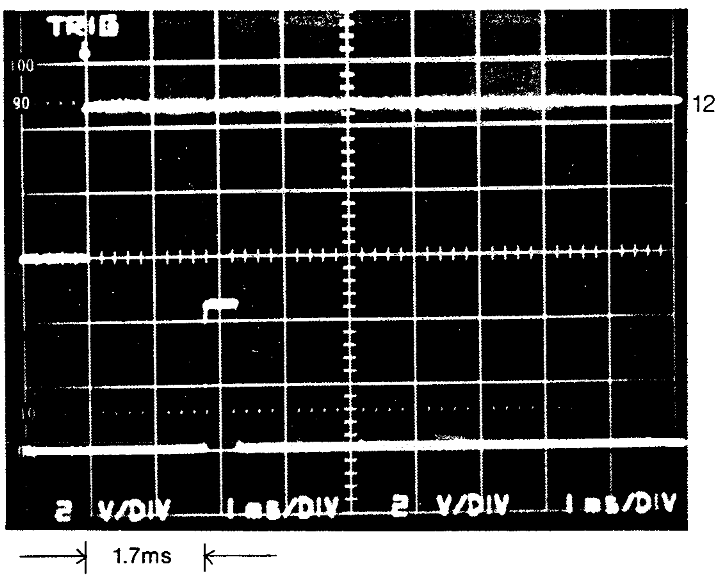
1) Play back the test tape.
2) Set the oscilloscope in the chop mode connect the CH1 to SW pulse (P506 2), the CH2 to TP 204 (video out) with CH1 triggering.
3) Adjust R512 for the positive trigger until 6.5H±0.5H cycles before the vertical SYNC pulse.
4) Also, adjust R552 for the negative trigger until 6.5H±0.5H cycles before the vertical SYNC pulse.



2. SUB-TRACKING ADJUSTMENT

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 515	P506 1	Oscilloscope	Play	DP-2 (Stair Step)

1) Set the tracking volume to the mechanical center where it clicks, play the test tape.
2) Set the oscilloscope in the chop mode connect the CH1 to the SW pulse (P506 2), the CH2 to the CTL pulse (P506 1) with CH1 triggering.
3) Adjust R515 until the phase difference between the rising EDGE of the Sw pulse and the CTL pulse is 1.7msec as shown below.



3. REEL MOTOR CURRENT ADJUSTMENT

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 649	TP 601 TP 602 (GND)	VTVM (DC mV Range)	STILL	Any Cassette Tape

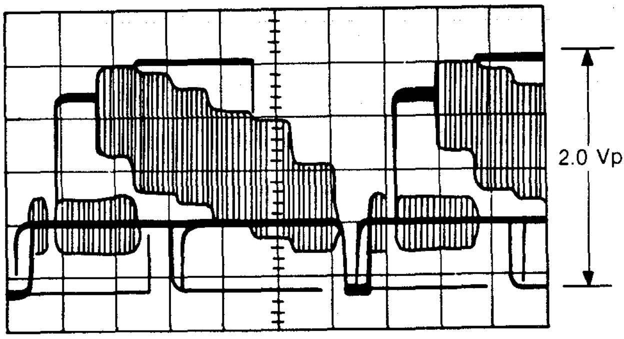
1) Connect eht (+) terminal of the VTVM to the TP 601, (−) terminal to the TP 602 (GND).
2) Set up the VCR in the still mode.
3) Adjust R 649 until the DC voltage is 190±1mV.

2-3-3. VIDEO CIRCUIT ADJUSTMENT METHOD

1. E.E VIDEO LEVEL

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 221	TP 204	Oscilloscope	EE	—

1) Feed the color bar signal to the line input terminal. And set for the stop (EE) mode.
2) Connect the oscilloscope to TP 204 and trigger the scope with a composite SYNC signal at TP 213 (H.D. pulse).
3) Adjust the oscilloscope so that it can display a waveform of approx. 2H.
4) Adjust R 221 to obtain 2.0 Vp-p±0.2 Vp-p between the SYNC tip and 100% white level.



Horizontal: 10 μs/div
Vertical : 0.5 V/div

2. SYNC TIP FREQUENCY

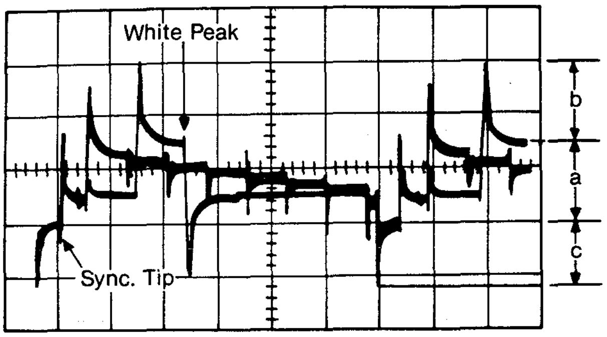
Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 222	TP 207	Freq. Counter	REC	—

1) Set the unit to Rec mode with no video signal as input.
2) Connect the frequency counter to TP 207.
3) Adjust R 222 until the SYNC. Tip frequency becomes 3.8 MHz±0.1 MHz.

3. WHITE AND DARK CLIP

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 225 R 224	TP 208	Oscilloscope	EE	—

1) Feed the color bar signal to the line input terminal. And set for the stop (EE) mode.
2) Connect the oscilloscope to TP 208 and trigger the scope with a composite SYNC signal at TP 213 (H.D. pulse). Adjust the scope so that it can display a wavefrom of approx. 2H.
3) At TP 208 (W/D clip out), with the rated signal level (from SYNC tip to white peak) taken as 100%, adjust R 225 (white clip) so that amplitude of overshoot appearing on the video signal side shows 80±5% of a Y-signal amplitude of 100%.
4) In the same condition, adjust R 224 (dark clip) so that an undershoot appearing on the SYNC tip side shows 40±5% of a Y-signal amplitude of 100%.



White clip
a:b=1:0.8
Dark clip
a:c=1:0.4

Horizontal: 10 µs/div
Vertical: 0.5 V/dw

4. VCO FREQUENCY

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 452	TP 210	Freq. Counter	EE	—

1) Feed the color bar signal to the line input terminal.
2) Apply DC voltage of 2.5V±0.02V to TP 211.
3) Connect the frequency counter to TP 210 and set the measurement range to a position that gives reading accuracy of 1 KHz.
4) Adjust R 452 until a frequency reading of 5.15 MHz±100 KHz is obtained.

5. 4.43 MHz X-TAL FREQUENCY

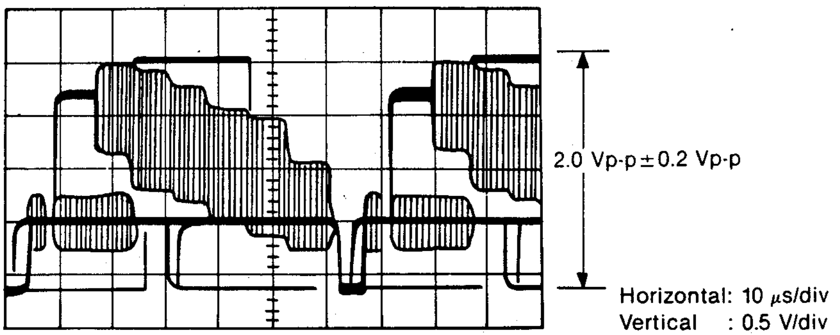
Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
C 451	TP 212	Freq. Counter	PB	DP-1

1) Playback the test tape (MVP-01: Color bar signal).
2) Connect a frequency counter to TP 212 and set the measurement range to a position which gives reading accuracy of 1 Hz.
3) Adjust C 451 trimmer until the frequency reading of 4.433619±15 Hz is obtained. (Please use the plastic tip driver).

6. PLAYBACK Y-SIGNAL OUTPUT LEVEL

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 229	TP 204	Oscilloscope	PB	DP-1

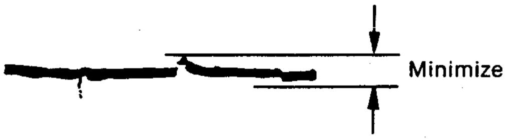
1) Playback the test tape (MVP-01: Color bar signal).
2) Connect the oscilloscope to TP 204 and trigger the scope with a composite SYNC signal at TP 213 (H.D. pulse). Adjust the scope so that it can display a waveform of approx. 2H.
3) Adjust R 229 to obtain 2.0 Vp-p±0.2 Vp-p between the SYNC tip and 100% white level.



7. LINE NOISE CANCELLER

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 228	TP 209	Oscilloscope	PB	DP-1

1) Playback the test tape (MVP-01: Color bar signal).
2) Connect the oscilloscope to TP 209 and trigger the scope with a composite SYNC signal at TP 213 (H.D. pulse). Adjust the scope so that it can display a waveform of approx. 2H.
3) Adjust R 228 to minimize the output level.



8. PRE-AMP FREQUENCY CHARACTERISTICS

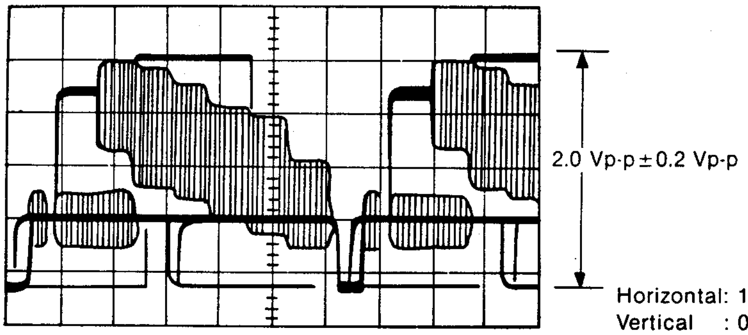
Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 153 R 152	TP 202	Oscilloscope	PB	DP-3

1) Playback the RF sweep test tape (MVP-03).
2) Connect the oscilloscope to TP 202 and trigger the scope with a switching pulse (TP 203).
3) Set the oscilloscope SYNC slope to plus (+) and adjust R 152 so that the 5 MHz level becomes equal level of the 4 MHz. (Level of the 4 MHz is about 500±10mV).
4) Set the oscilloscope SYNC slope to minus (−) in the same manner, adjust R 153.

9. FM DEVIATION

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 223	TP 204	Oscilloscope	PB & REC	DP-1 Blank Tape

1) Confirm that the adjustment for the playback Y-signal output level has been made correctly.
2) Feed the color bar signal to the line input terminal, and set the VTR to the record mode.
3) Connect the oscilloscope to TP 204 and trigger the scope with a composite SYNC signal at TP 213. (H.D. pulse)
4) Record the color bar signal for a few minute and playback it. Then confirm that the playback Y-signal output level is 2.0 Vp-p±0.2 Vp-p.
5) If the playback Y-signal output level is not 2.0 Vp-p±0.2 Vp-p, then adjust as follows.
   5-1) Set the VTR in the record mode.
   5-2) Turn the variable resistor R 223 a little.
   5-3) Record the color bar signal for a few minute and playback it.
   5-4) Confirm the playback Y-signal output is 2.0 Vp-p±0.2 Vp-p.
   5-5) Repeat from STEP 5-1) to 5-4) until the playback Y-signal output level becomes 2.0 Vp-p±0.2 Vp-p between the SYNC. Tip and 100% white level.

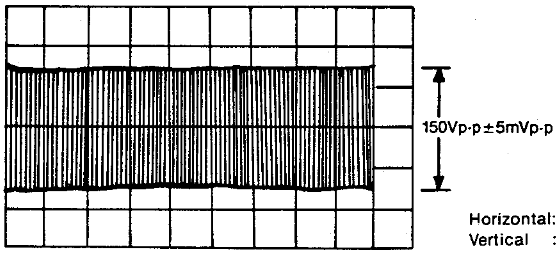


Horizontal: 10 μs/div
Vertical : 0.5 V/div

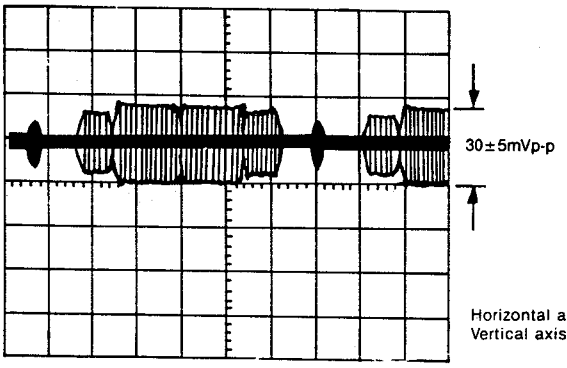
10. Y AND COLOR RECORD CURRENT

Adj. Location	Checking Point	Measuring Equipment	Mode	Test Tape
R 151 R 451	TP 101 (GND) TP 102	Oscilloscope	REC.	Blank Tape

1) Feed the no video signal to the line input terminal, and set the VTR to the record mode.
2) Connect the probe to TP 102 and TP 101 (GND), and adjust R 151 so that Y-FM record current level becomes 150 Vp-p±5m Vp-p.
3) And then feed the color bar signal to the line input terminal, and set the VTR to the record mode.
4) Connect the probe to TP 102 and TP 101 (GND), and trigger the scope with a composite SYNC signal at TP 213 (H.D. pulse).
5) Short-circuit between TP 103 and TPG 01.
6) Adjust R 451 so that color record current level becomes 30m Vp-p±5m Vp-p.



Horizontal: 10 μs/div.
Vertical : 0.5 V/div.



Horizontal axis: 10μs/div.
Vertical axis : 50mV/div.

2-3-4. AUDIO CIRCUIT ADJUSTMENT METHOD

1. PLAYBACK OUTPUT LEVEL

Adj. Location	Measuring Point	Measuring Equipment	Condition of Adj.	Test Tape
R 733	Audio Line Out	Audio Level Meter	Play Mode	DP-1

1) Connect the audio level meter to the audio line output jack.
2) Play back the test tape.
3) Adjust R 733 until the audio level meter reads −5.0 dBm play back output.

2. PLAYBACK OUTPUT FREQUENCY CHARACTERISTIC

Adj. Location	Measuring Point	Measuring Equipment	Condition of Adj.	Test Tape
Checking	Audio Line Out	Audio Level Meter	Play Mode	DP-1 DP-2

1) Playback the MVP-1, MVP-2 tape, and confirm that the playback output level at 6 KHz is within 0±3dB as referenced to the 1 KHz playback output level.

3. BIAS CURRENT ADJUSTMENT AND OSCILLATION FREQUENCY CHECKING

Adj. Location	Measuring Point	Measuring Equipment	Condition of Adj.	Test Tape
R 734	TP 702	Frequency Counter VTVM	Rec. Mode	Blank Tape

1) Connect the frequency counter to TP 702.
2) Connect the positive lead of the VTVM to audio head P.C board PH 02 1 and negative lead to PH 02 2.
3) Set the VCR in recording mode.
4) Confirm the frequency counter display is 70 KHz±10% and adjust R 734 until VTVM reads 2.7 mVms.

4. RECORD PLAYBACK FREQUENCY RESPONSE

Adj. Location	Measuring Point	Measuring Equipment	Condition of Adj.	Test Tape
Checking	Audio Line Out	Audio Level Meter Audio Signal Generator	REC Play Mode	Blank Tape

1) Connect the audio signal generator to the audio line input jack. And the audio level meter to the audio line output jack.
2) Record reference audio signal of the 400 Hz and 8 KHz audio signal CF −25dBm.
3) Check to insure that the 8 KHz playback output level is within −3±3dB as reference to the 400 Hz playback output level.
4) If the difference between 8 KHz playback output level and 400 Hz is more than +0 dB in crease the bias current more than 2.7 mVms, and if if the difference is less than −6 dB reduce the bias current less than 2.7 mVrms.

5. RECORD-PLAYBACK OUTPUT LEVEL

Adj. Location	Measuring Point	Measuring Equipment	Condition of Adj.	Test Tape
Checking	Audio Line Out	Audio Level Meter Audio Signal Generator	REC Play Mode	Blank Tape

1) Connect the audio signal generator to the audio line input jack.
2) Record and playback the input of the audio reference signal 1 KHz, −10 dBm.
3) Confirm that play output level is −5±2 dBm as referenced to the playback output level.

2-3-5 PIF. SELECTOR CIRCUIT ADJUSTMENT METHOD.

1. AGC DELAY

Adjustment Location	Measuring Point	Measuring Equipment	Conditions of Adjustment
R 006	TV Screen	—	REC. Mode

If R 006 is turned too far clockwise TV monitor will have buzz in the sound.
If R 006 is turned too far counter clockwise picture quality may become poor.
1) Turn R 006 fully clckwise.
2) Turn R 006 slowly counter clockwise until noise and sound buzz are minimized.

SECTION 3.

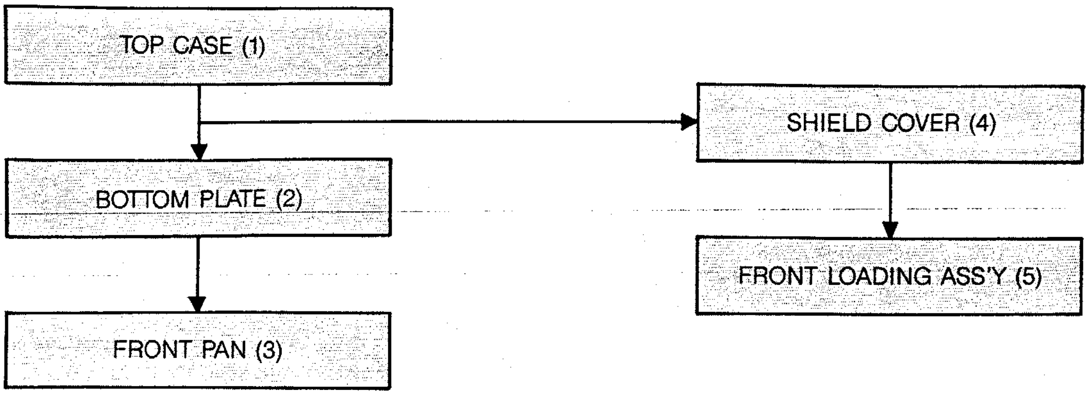
MECHANICAL ADJUSTMENTS PROCEDURES

3-1. DISASSEMBLY OF CABINET PARTS

3-1-1. Disassembly Flowchart

This flowchart indicates disassembly step of the cabinet parts and the P.C. boards in order to find the items necessary for servicing. When reassemblying, perform the step in the reverse order.

Note: When removing the Front Panel, work with care not to break the locking portion of the panel.


TOP CASE (1)
BOTTOM PLATE (2)
FRONT PAN (3)
SHIELD COVER (4)
FRONT LOADING ASS'Y (5)

3-1-2. Detailed Disassembly Method

1. Removal of Top Case

Remove the 4 screws (A). Then carefully lift the rear of case removed.

Note: Place the cushion under the deck lest the top portion of the deck should be damaged.

2. Removal of Bottom Plate

Place the deck up side down so that the boittom side may face upward.

Then removel the 8 screws (B) to remove the Bottom Plate.

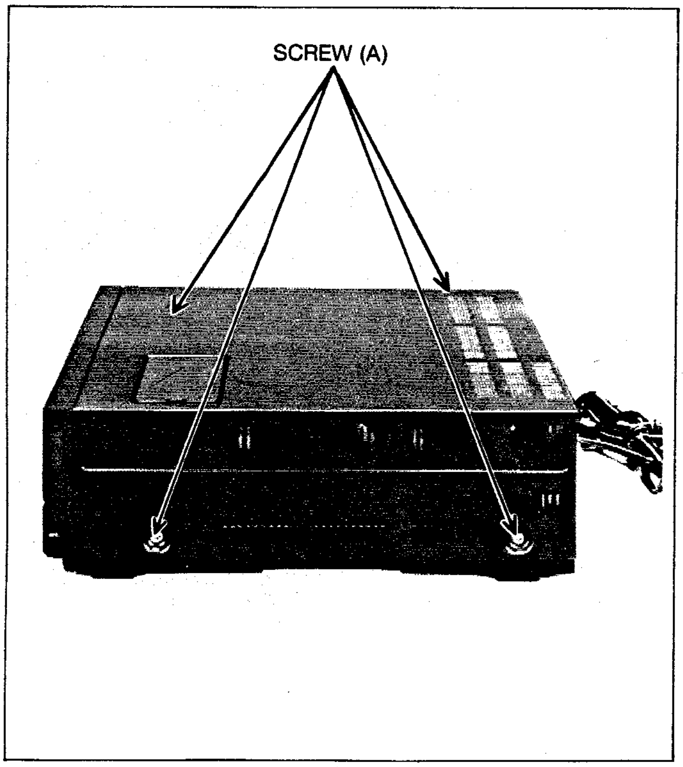


Fig. 2

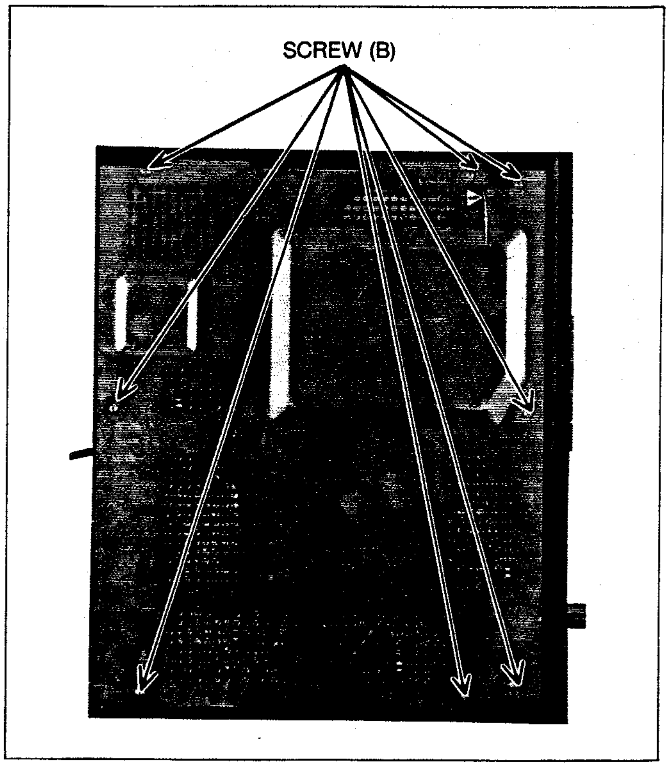


Fig.3

3. Removal of Front Panel
Remove 2 screws (C) and unlock the 6 locking portions (D). Then hold the top portion of the panel and pull it toward the front of the deck to remove.

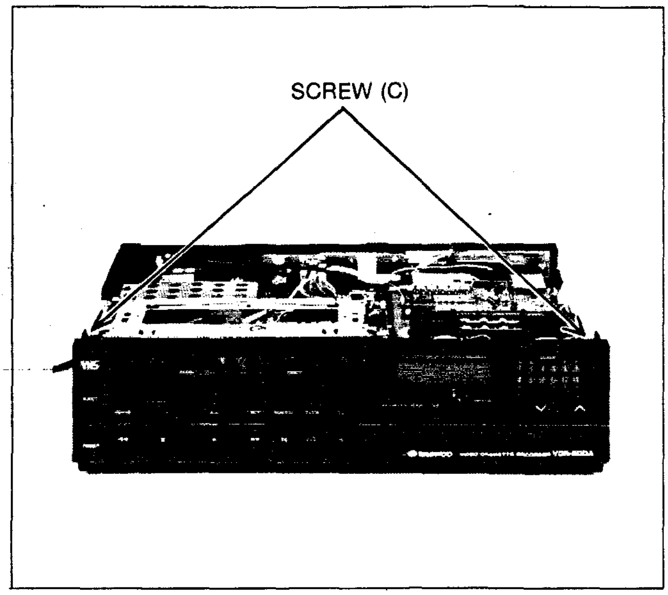


Fig. 4

4. Removal of Cylinder Cover
Remove 4 screws (E) and the Cylinder Cover.

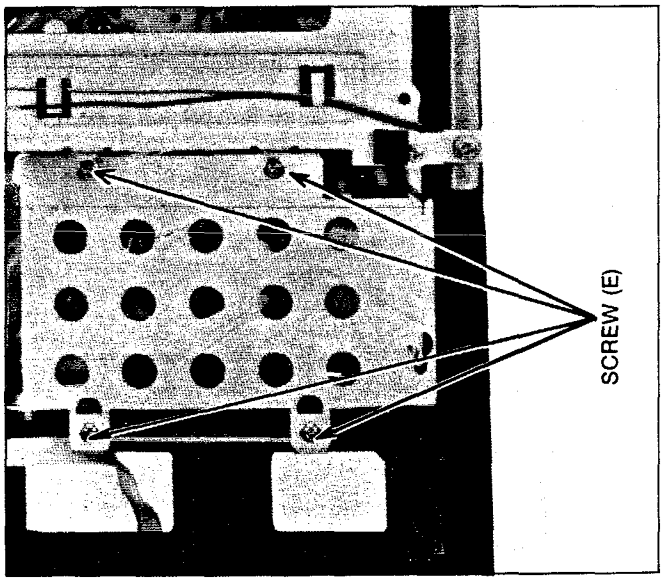


Fig. 5

5. Removal of Front Loading Ass'y
Disconnect the connector P621 from the Front Loading Motor Connection P.C. Board. Remove 4 screws (G) and remove the Front Loading Ass'y.
Then carefully pull out the Front Loading Ass'y.

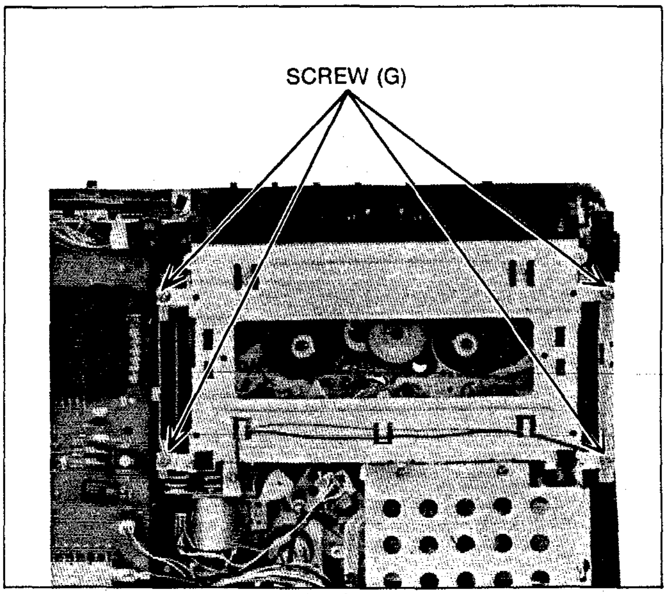


Fig. 6

3-1-3. P.C. Board Opening Method

1. Removal of Selector P.C. Board Units
(1) Remove the Top Case, Bottom Plate and Front Panel. (Refer to DISASSEMBLY METHOD Item 1, 2 and 3)
(2) Release some wires from the wire clampers and unlock the 4 locking portions (A).
(3) Lift Selector P.C. Board till the 2 locking portions (B) are unlocked and pull it upward to remove.

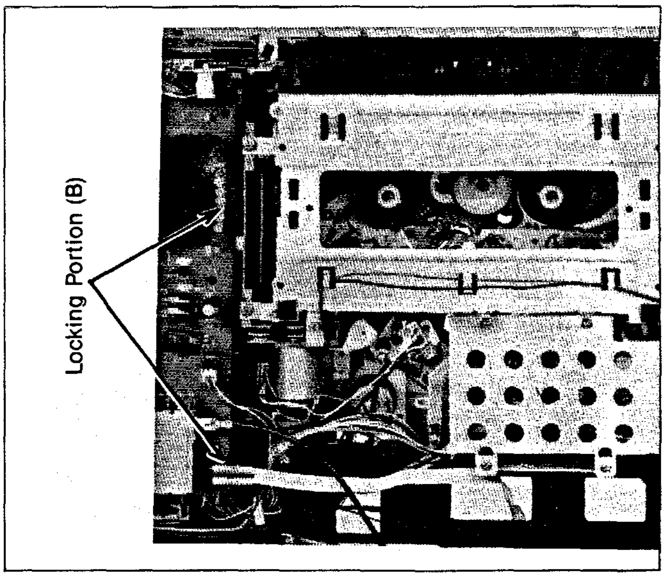


Fig. 7

2. Opening the Video-Audio-Power P.C. Board Unit.

(1) Remove the Bottom Plate. (Refer to Disassembly Method Item 2).

(2) Remove 3 screws (A) to open the Video-Audio-Power P.C. Board Unit.

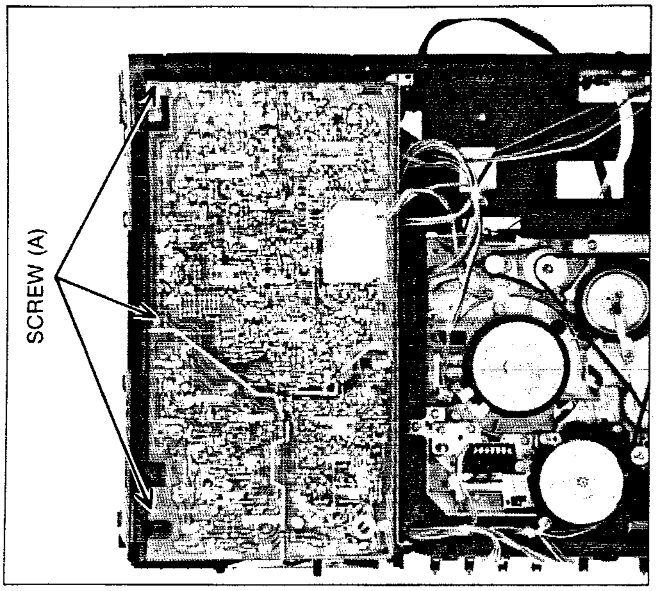


Fig. 8

3-2 ADJUSTMENT PROCEDURE

3-2-1. Cleaning the Video Heads

To clean the video heads, wipe them with a cleaning bar moistened in isopropyl alcohol. Never leave the video heads revolving during cleaning or they could be damaged. The heads and drum should be cleaned by lightly moving the cleaning bar right and left on the surface.

3-2-2. Replacement of Upper Drum AS

Work with extreme care when removing or replacing the upper drum assembly.
Do not touch the video heads during work.

1. Remove the screws and unsolder the rotary trans wires.
2. Lift the upper drum assembly from the shaft as sembly.
3. Clean the shaft Assembly and the surface contacted with the upper drum assembly with the cleaning bar moistened in isopropyl alcohol.
4. Install the new one so that the rotary trans wires match the upper PCB before replacing and tighten the 2 screws.
5. Resolder the rotary trans wires to upper PCB.
6. Upon completion of replacement, confirm the performance. If any further performance is required, refer to the Tape Interchangeability Adjustment section and perform the procedures.

3-2-3. Replacement of Drum Total Assembly

Work with extreme care when removing or replacing DRUM TOTAL ASSEMBLY. Do not touch the video heads during servicing.

1. Remove the Bottom plate, Top Case, Front Panel and Shield Cover. Then open the bottom P.C. Board. Refer to "Disassembly Method" section.
2. Disconnect 2 connectors (H201, H506) and remove the DRUM TOTAL ASSEMBLY by removing 3 screws (B). Since there is very small clearnace between cylinder and main base, remove the cylinder gently and carefully.
3. Reinstall the DRUM TOTAL ASSEMBLY to the Main Base tighten the 3 screws (B) and connect the H201 and H506, and recover the Cylinder Cover.

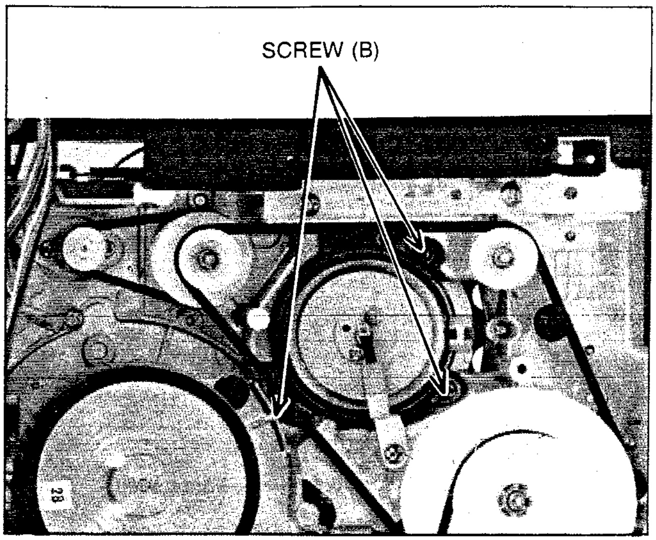


Fig. 9

Note: Upon completion of replacement, confirm the performance. And if any further maintenance is required, refer to the "Tape Interchangeability Adjustment" section and perform the necessary items.

3-2-4. Adjustment of Record Safety Switch

*Specification
The switch is turned on when the cassette tape with safety tab is used, and kept off when that without safety tab is used.

*Equipment Required
Cassette Holder Fixture (JA-50-009)

1. Remove the Top Case, Bottom Plate, Front Panel and Front Loading Ass'y.
2. Remove the G ring by the G ring bolder and pull out the Supply Main Brake.
3. Slightly loosen the 2 screws (A) and (B), and turn the switch holder clockwise.
4. Connect the Record Safety Switch connector P603 to the Lamp Fig.
5. Place the Fixture.
6. Turn the switch holder counter-clockwise slowly until the switch is kept off and then tighten the 2 screws (A) and (B) install the supply main brake and the G ring.
7. After the adjustment, confirm that the switch turns on by using a tape with tab and off without tab.

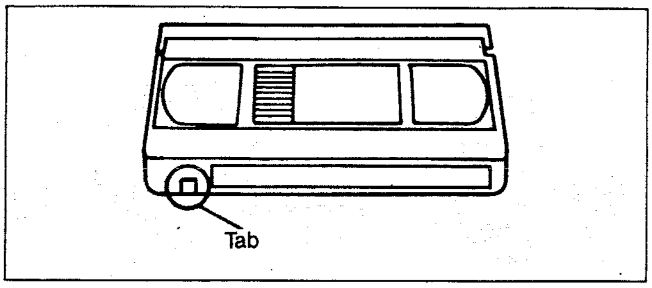


Fig. 10

3-2-5. Confirmation of Pressing Force of Pinch Roller

Equipment Required:
FAN-Type Tension Gage.

1. Remove the Top Case, Bottom plate, Front Panel and the Front Loading Ass'y having a cassette tape in and with connector unit.
2. Push the Play Button for setting the deck to playback condition.
3. Set Fan-Type Tension Gage to the part (A) of Pinch Lever.
4. Press the Lever with the gage in the direction indicated by the arrow as shown below.

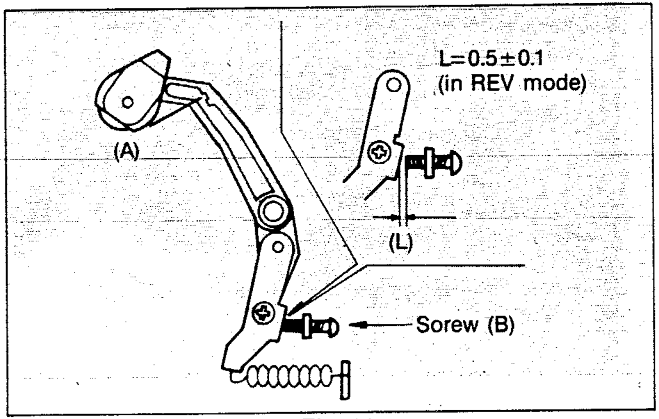


Fig. 11

5. Confirm that the value indicated by the tension gage is 1,600±350g at the moment of tape's stopping.
6. If it is out of spec, replace the pressure spring.
7. Place the deck in REV move.
8. Turn screw (B) clockwise or counterclockwise by the pliers, so that the clearance (L) becomes 0.5±0.1 mm.

3-2-6. Position Adjustment of Tension Pole.

*Equipment Required:
Tension Pole Adjustment Plate . . . . (JA-50-011)
Fine Adjustment Screwdriver

1. Remove the Top Case, Bottom plate, Front Panel and Front Loading Ass'y.
2. Insert a cassette tape, and push the play button for loading. As soon as loading is completed, take out the AC plug.
3. Place the adjustment plate and slightly loosen the screw securing the band brake bracket.
4. Insert the fine adjustment screwdriver into the hole and move the band brake bracket in either of direction so that the tension pole places within Jig Fixture.

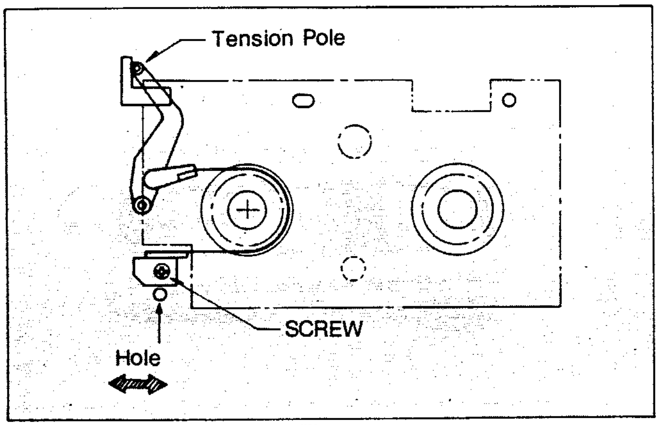
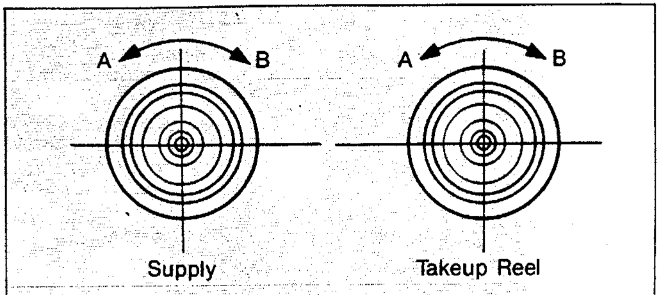


Fig. 12

3-2-7. Confirmation/Adjustment of Brake Torque

A. Confirmation Procedure
*Equipment Required:
Torque Gauge . . . . 300 ATG & 1200 ATG
Adaptor for Gauge . . . .

Spec.



	A	B
Takeup	670±170	100±40
Supply	620±270	110±40

Fig. 13 Spec. of Brake Torque

1. Remove the Top Case, Bottom Plate, front panel and the Front Loading Ass'y.
2. Attach the adaptor to the torque gauge and place the deck in STOP mode.
3. Place the toque gauge on the reel table.

The reel table should be from the weight of gage.

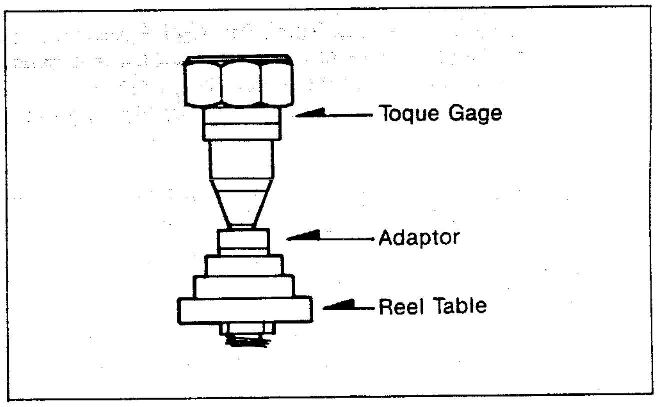


Fig. 14 Measuring Method.

4. Turn torque gauge in the direction indicated in the Fig. 13 until the brake begins slipping.

B. Adjustment Procedure

To adjust the brake torque, change the notch.

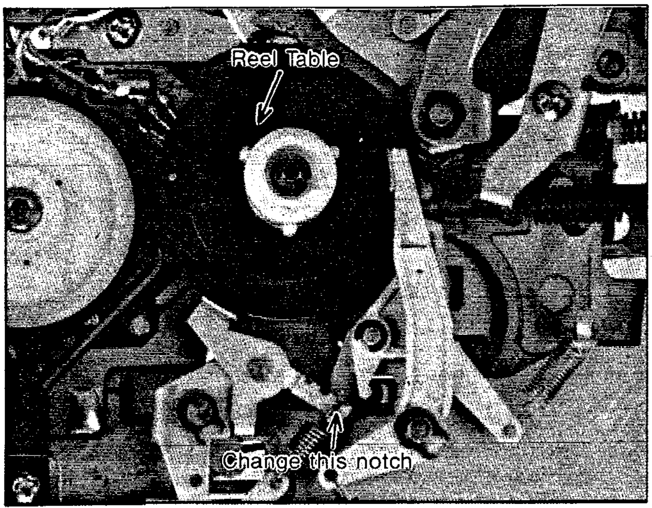


Fig. 15

Note: If proper brake torque could not be obtained by changing the spring position, clean the rotating surface of the reel table with soft cloth and confirm the torque again before replacing it.

3-2-8. Confirmation of Takeup Torque

*Equipment Required:

Dial Torque Gauge	1200 ARG
Adaptor for Gauge	

*Specification:

in F.F	more than 600 g-cm
in REW	more than 600 g-cm

1. Remove the Top Case, Bottom Plate, Front Panel and the Front Loading Ass'y with the P621 connector unit.
2. Insert a cassette tape and attach the adaptor to the torque gauge.
3. Set a torque gauge to the Take-up reel Table, push the FF button and read torque on gauge.

Note: While measuring, the weight of gauge should not rest on reel table.

4. Set the torque gauge to the Supply Reel Table, press the rewind button for rewind mode. And read the torque on gauge.

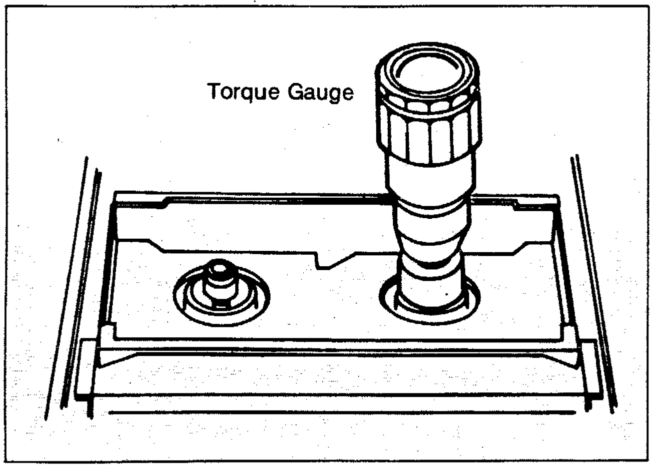


Fig. 16
Measuring Method

Note: There are no-adjustment here.
If the torque values are off considerably, rollers or idlers or reel tables may need replacement.

3-2-9. Measurement and Adjustment of Back Tension

A. Measurement Procedure

*Equipment Required:
Back Tension Meter (Tentelometer)
VHS Cassette Tape (120 minutes tape)

*Specification:
25 ~ 30 g

1. Remove the Top Case and Cylinder Cover.
2. Pull the erase head in the direction indicated by the arrow and hold it by adhesive tape.
3. Play back the cassette tape from its beginning and wait until tape running is stabilized. (for approx. 10 to 20 seconds)
4. Insert tension meter in tape path and confirm the value of tension.

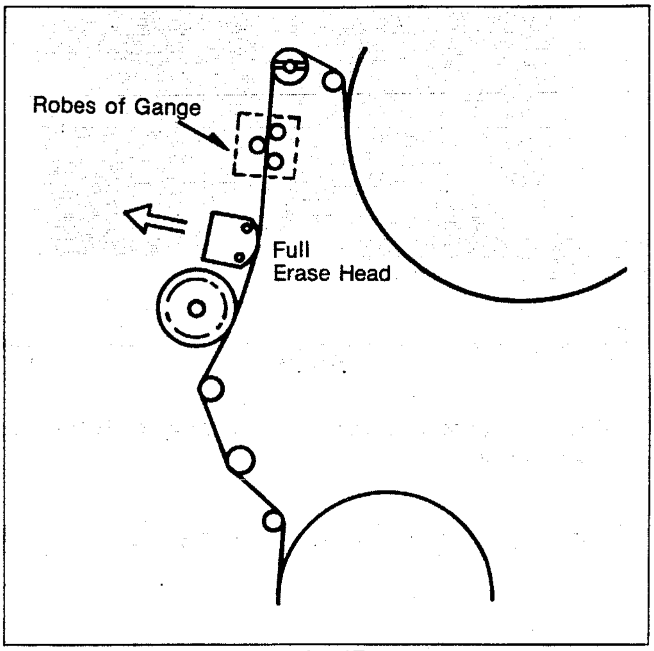


Fig. 17
Measurement of Back Tension

Notes: 1. Make sure that the three probes of the meter are all in good contact with tape.
2. It is recommended to measure three times as tension meter is very sensitive.

(Adjustment Procedure of this section is described on next page.)

B. Adjustment Produre

*Equipment Reqired:
Fine adjustment Screw-driver . . . .

1. Remove the Top Case, Bottom Plate, Front Panel, Front Loading Ass'y and the Cylinder Cover.
2. Loosen a screw (A) and insert the fine adjustment screwdriver into the hole (B).
3. Move the adjustment driver in either of direction indicated by the arrow to obtain the specified tension. Turn the driver clockwise to raise the tension, counterclockwise to lower it.
4. Tighten the screw (A) and install the Front Loading Ass'y and verify the tension with the Tentelometer once again.

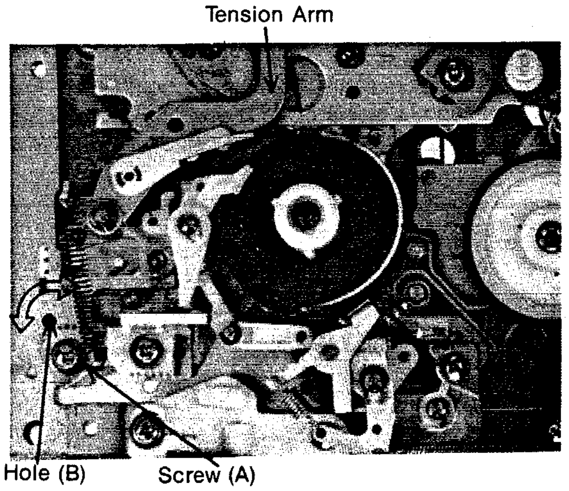


Fig. 18

5. After the above adjustment is completed, remove the adhesive tape.

3-2-10. Height Adjustment of Reel Tables

*Equipment Required:
Post Adjustment Plate . . . . (JA-50-013)
Reel Table Height
Fixture . . . . (JA-40-014)

*Specification . . . .

1. Remove the Top Case, Bottom Plate, Front Panel and the Front Loading Ass'y.
2. Place the post adjustment plate, put the dial gauge on it and set the dial gauge to zero "0" under the condition that scraper of gauge touches the cut-out portion of the plate.

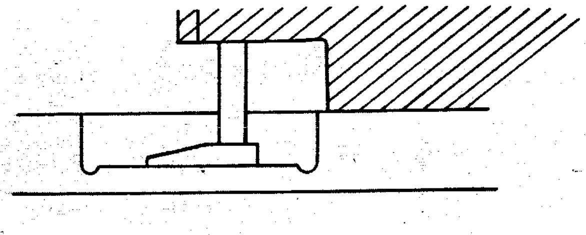


Fig. 1
Adjustment of Reel Table Height-(1)

3. Then measure the top portion of reel table and confirm the difference from the condition just performed in the former step. Also perform the same measurement and confirmation for the other reel table.

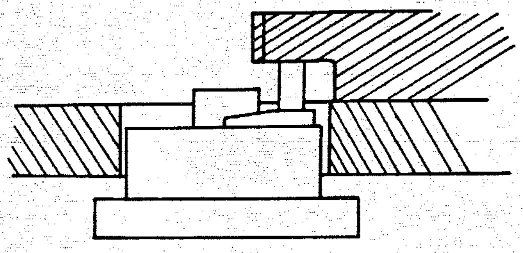


Fig. 20
Adjustment of Reel Table Height-(2)

4. If the difference is more than 0.1mm (high or lower), adjust the height of reel table to obtain the specified height.
5. For the adjustment, change the polyslider located under the reel table. The poly-sliders of following thickness are available.

Polyslider Thickness	Part No.
0.13 mm	97S3903700
0.25 mm	97S390400
0.5 mm	97S3903600

Fig. 21

3-2-11. Height Adjustment of Tape Guide

*Equipment Required:
Hex. Wrench, (0.9 mm)
Post Adjustment Plate . . . . (JA-50-013)
Reel Table Height
Fixture . . . . (JA-50-014)
Nut Driver . . . . (Purchase locally)
Post Adjustment
Screwdriver

1. Remove the Front Loading Ass'y and place the adjustment plate.

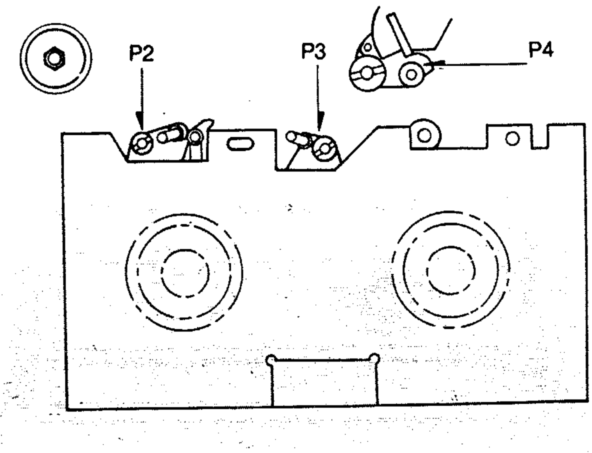


Fig. 22

2. At first lower all the posts so that the condition of height becomes as shown in Fig (23).
   (Lower end of post, tape guide should be lower than scraper) Loosen a hex. screw located in lower portion of posts (P1 & P3) and then turn them.

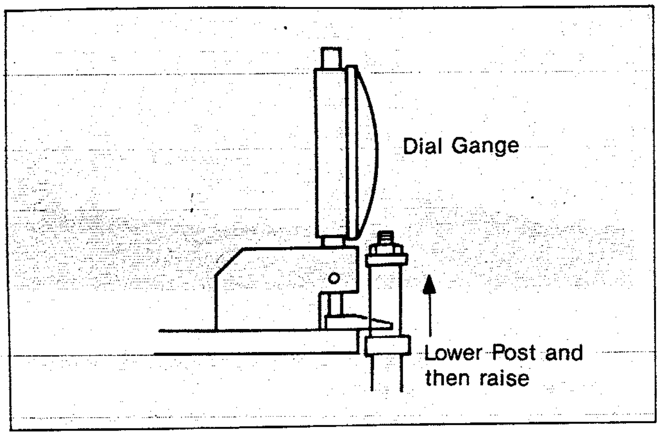


Fig. 23

3. Place the dial gauge on the adjustment plate and fit the scraper to the post. The condition to fit the scraper should be as shown..
   (The scraper of gauge should be fully lowered till it touches the plate).

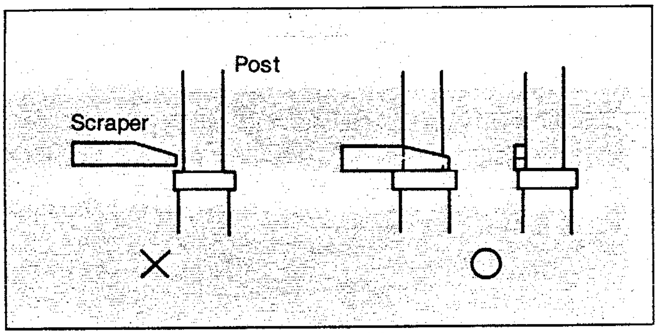


Fig. 24

4. Set the dial gauge to zero "0", and slowly raise the post until just the post is raised to touch the scraper. To adjust P1 and P4, use the nut driver.
   To adjust P2 and P3, use the post adjustment screwdriver.

Note: Upon completion of adjustment, tighten hex. screws on the P2 and P3.

3-2-12 Tape Interchangeability Adjustment

* Equipment Required:
Alignment Tape . . . . (DN-2)
Post Adjustment Screw driver

1. Remove the Top Case, Bottom Plate and the Cylinder Cover.
2. Set the tracking volume into the detent (fixed) position. And connect the osciloscope to P506 NO 4

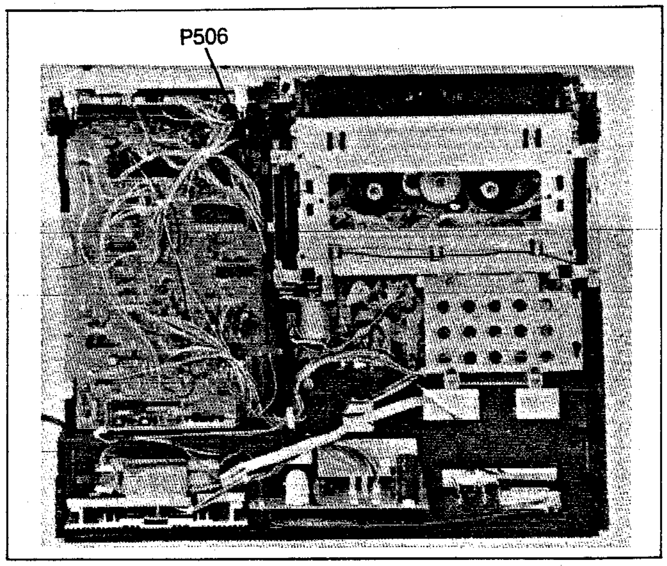


Fig. 25

3. Play back the alignment tape (DN-2) and adjust posts P2 and P3 watching the scope display (Envelope of P506 NO 4 on servo-logic P.C. board) so that the RF envelope on the scope becomels as flat as possible.
   (V1/V-max ≥ 0.7, VZ/V-max ≥ 0.8)

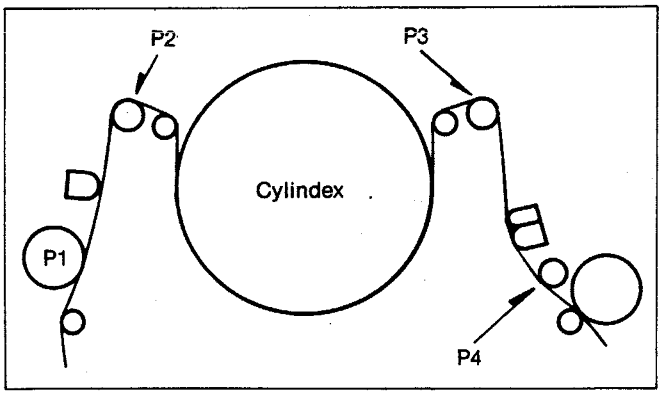


Fig. 26

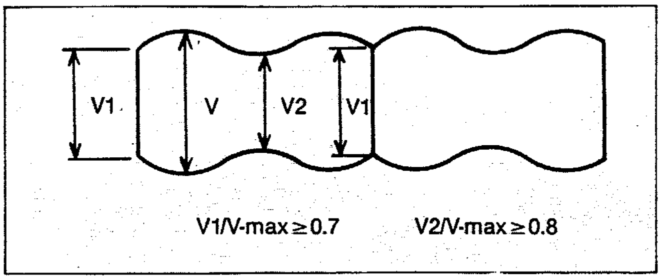


Fig. 27

4. When the scope display is as follows, adjust the height of P2.

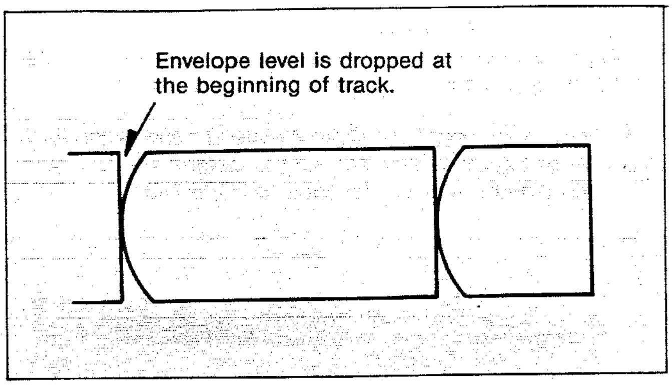

Envelope level is dropped at the beginning of track.

Fig. 28

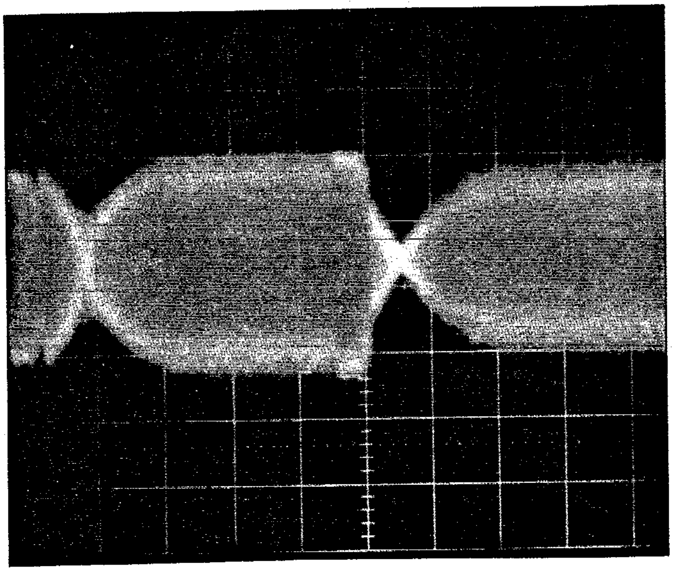


Fig. 29

5. When the scope display is as follows adjust the height of P3.

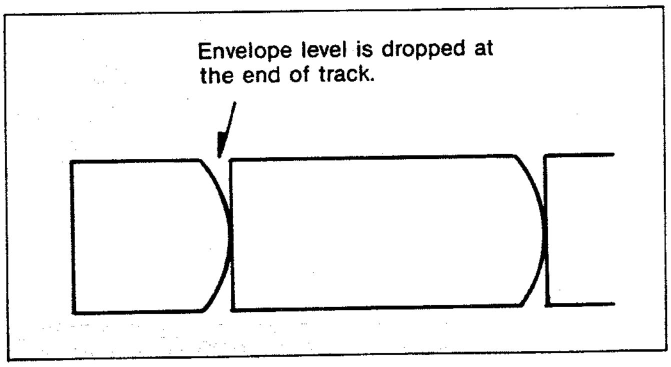

Envelope level is dropped at the end of track.

Fig. 30

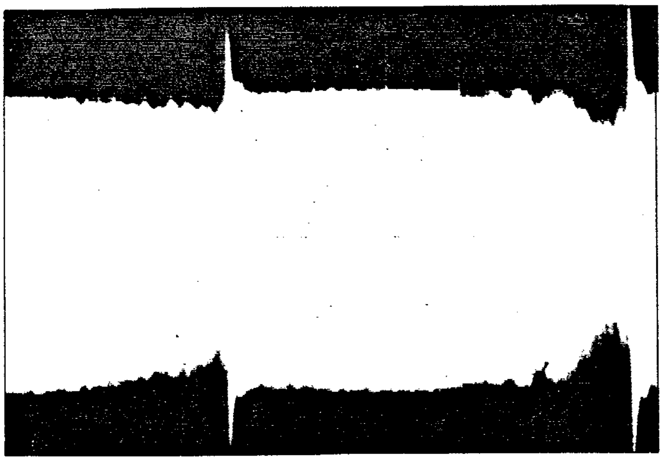


Fig. 31

6. The scope display with P2 and P3 adjusted correctly should become as shown below.

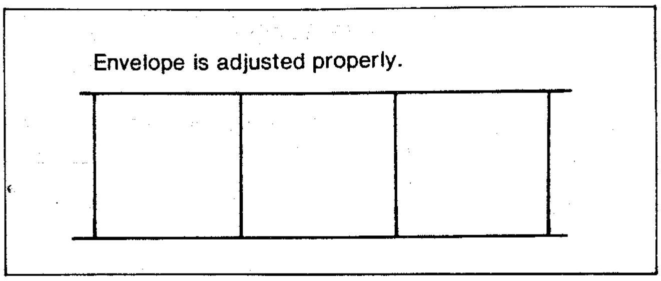

Envelope is adjusted properly.

Fig. 32

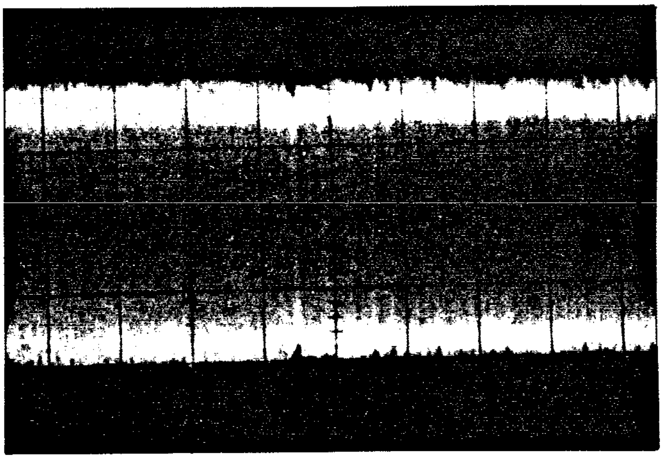


Fig. 33

7. When the adjustment is required, turn the top of post with the post adjustment screwdriver.

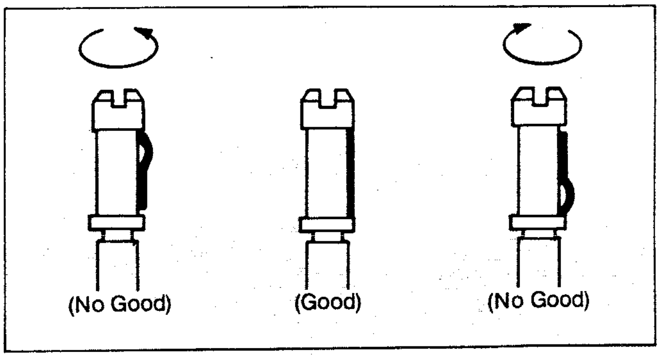

(No Good)
(Good)
(No Good)

Fig. 34

3-2-13. Adjustments and Confirmations of A/C Head

1. Horizontal Position Adjustment of A/C Head

* Equipment Required:
X-Position Adjustment Screwdriver . . . .

1. Set the tracking volume into the detent (fixed) position. And connect the oscilloscope to the P506NO4.
2. Playback the alignment tape DN-2 and confirm the envelope figure.
3. If the adjustment is required, set the X-position adjustment screw-driver into the slot of the adjust-cap and rorate in either of direction to obtain maximum envelope output.

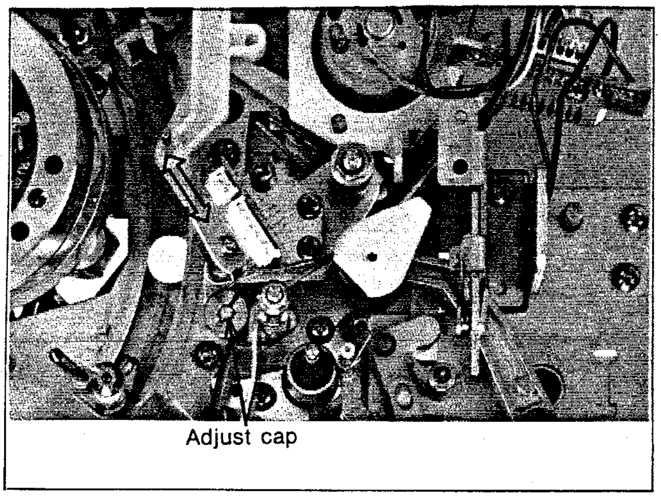


Fig. 35

2. Confirmation/Adjustment of A/C Head Height

A. Confirmation Porcedure
Looking at the lower edge of the control head with the tape running, ensure the lower edge of tape runs approximately 0.05mm above the lower edge of the control head.

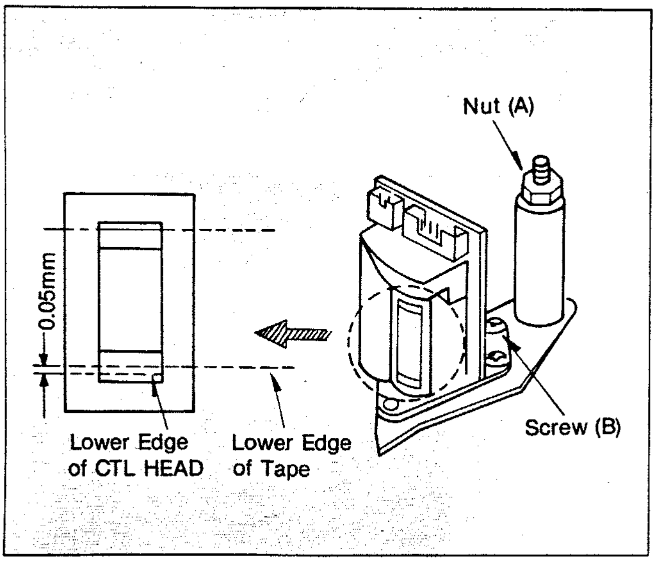


Fig. 36

B. Adjustment Procedure
Slightly turn the nut (A) in either directions to correct it. Turn clockwise to lower the head and counterclockwise to raise it.

Note: Unless the AC Head is replaced, this adjustment should not be done.

3. Tilt Adjustment of A/C Head

* Equipment Required:
Driver

A. Pre-Adjustment Procedure
Playback the tape and confirm the tape runs between lower and top limiters of the post P4. If the lower edge or top edge of the tape turns with waving or wrinkle, then correct the tilt of the A/C head by turning screw (B) shown in Fig. 36.

Note: Unless the post P4 is pre-adjusted, this pre-adjustment procedure should not be done. (Refer to the section of "Height Adjustment of Tape Guide Pole".

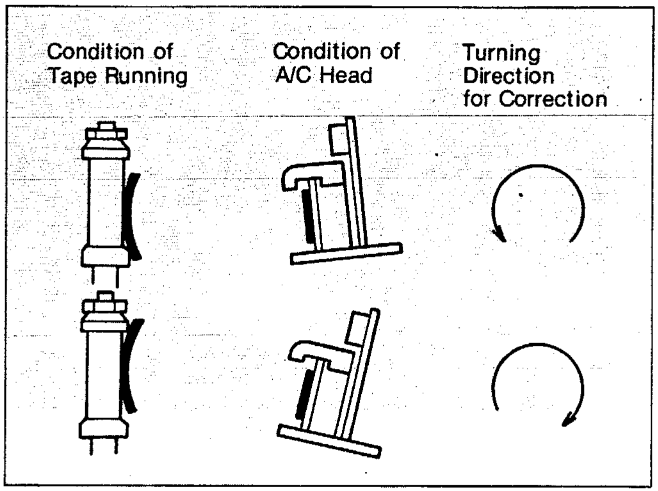


Fig. 37 Tilt Pre-Adjustment

B. Adjustment Procedure

1. Connect the oscilloscope to Test Point P504N04 on the Video Section.
2. Playback the monoscope portion of the alignment tape DN-2 and adjust screw (B) so the RF envelope output level becomes maximum.

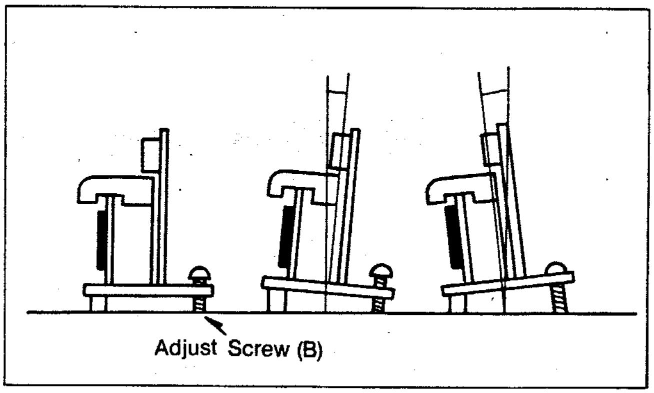


Fig. 38

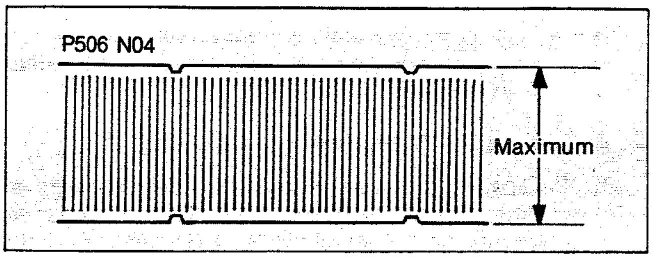


Fig. 39

4. Audio Azimuth Adjustment

* Equipment Required:
VHS Alignment Tape DN-2

1. Connect the oscilloscope to the audio output on the rear of the deck.
2. Playback the alignment tape (7KHz, Audio) DN-2.
3. Adjust screw (C) without spring on the head base so the output level becomes maximum.

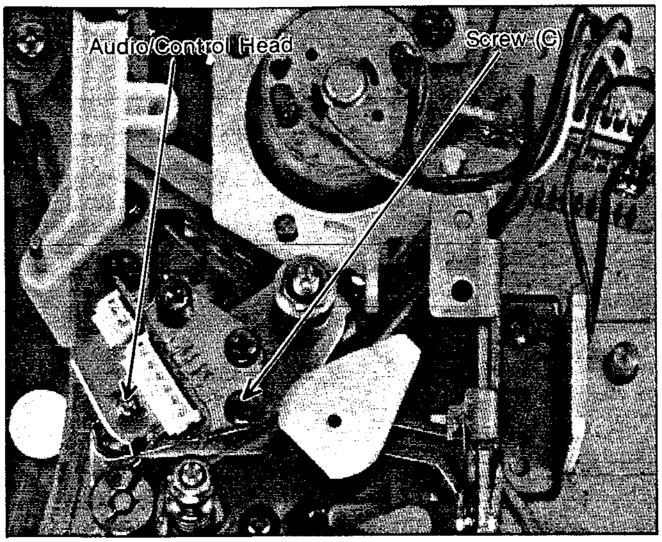


Fig. 40

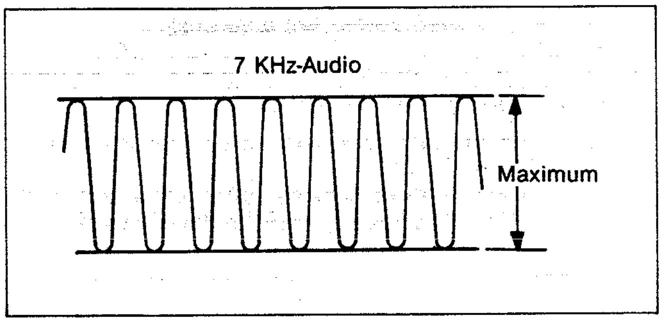


Fig. 41

3-2-14. Adjustment of Cam Gear and Slide Switch

General Condition:

The mechanism of this model is mostly engaged to the electrical circuit, System Control Circuit, through the slide switch. Therefore the relation between the slide switch and the cam gear decides all further mechanical movements of the mechanical parts such as levers, gears, rollers and so on.
If the adjustment of this item is performed improperly, the deck will be unloaded or compulsorily stopped. And it will result in being damaged at any mechanical or electrical parts.

Note: Before the adjustments turn power switch on and insert a cassette tape and set the slide switch to the stop position, and plug off.

A. Adjustment Procedures of Cam Gear

1. Turn Loading gear clockwise until the post 2 and 3 are fully unloaded. The small projection on the loading gear will be top portion under the condition of Unloading Completion.

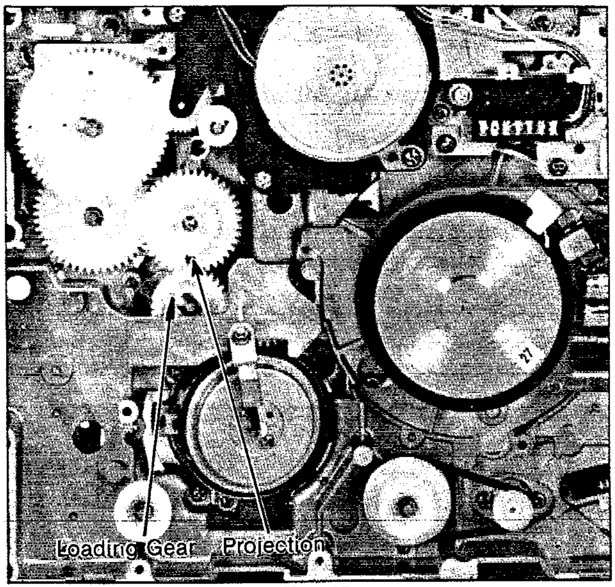


Fig. 42

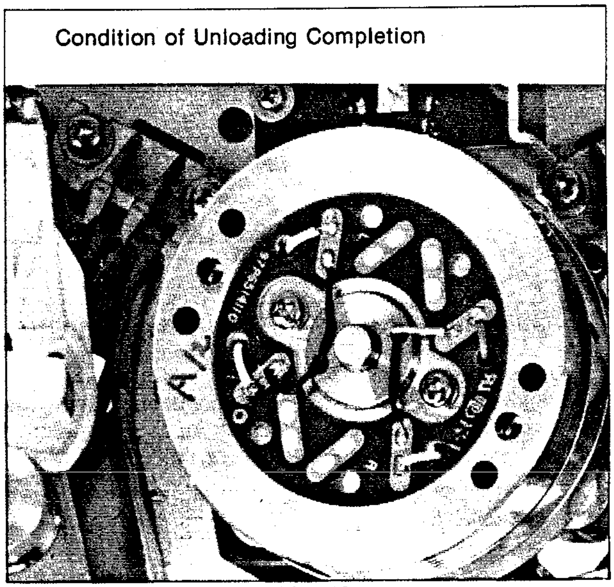


Fig. 43

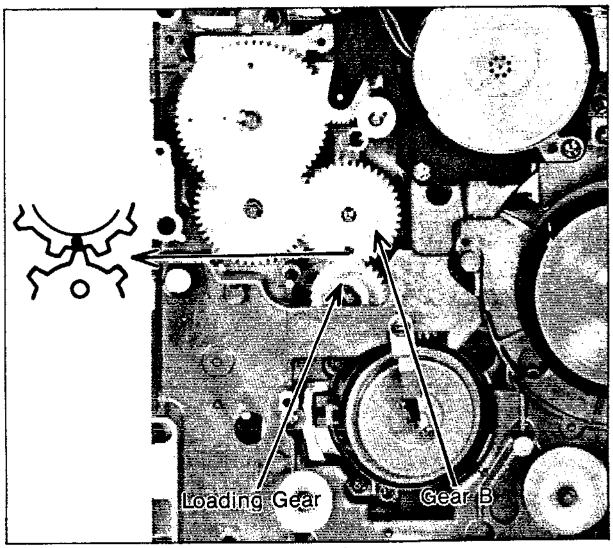


Fig. 44

2. Install the Gear B so the hole on Gear B meets the projection on the loading gear. Ensure that the loading gear is still in the condition of the unloading completion.

3. Slowly slide the connect plate so that the V-shaped mark meet the V-shaped mark of the slide switch. As a result, •connect plate and slide switch are in a position to be stop mode.
4. Insert the cam gear so that the hole (A) on the cam gear meets the hole on the connect plate and the hole on main base. To meet the three holes easily, use the small hex. wrench or metal pin.
   Alos ensure that two V-shaped marks are fixed.

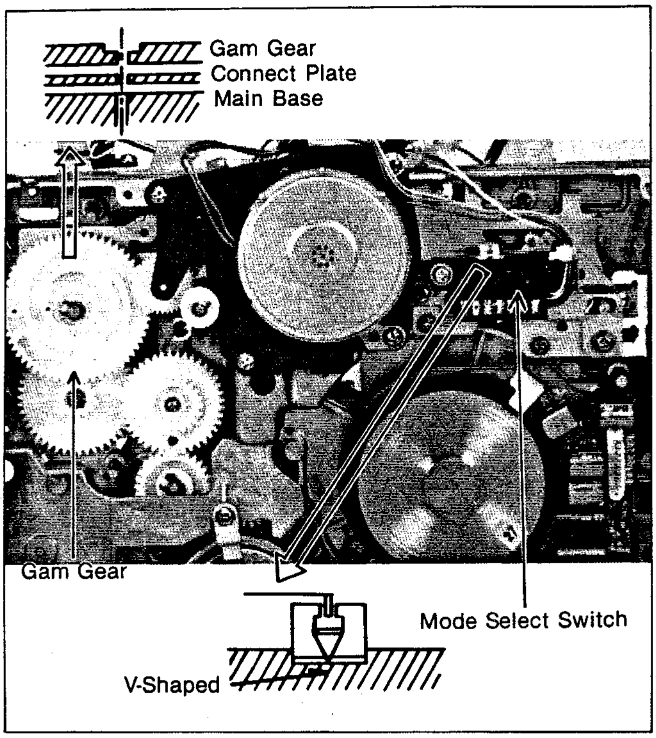

Gam Gear
Connect Plate
Main Base
Gam Gear
Mode Select Switch
V-Shaped

Fig. 45

5. Install the rack gear so the boss on the rack gear meets the inner slot of the cam gear (simple slot side). And install 2 G rings to mount cam gear and rack gear.

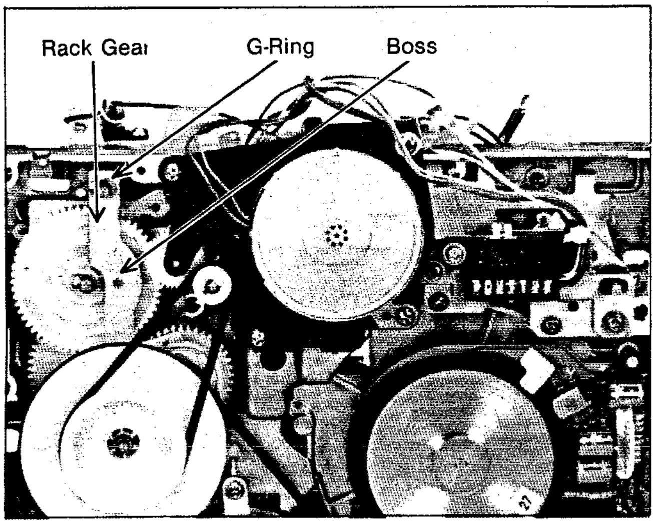

Rack Geai
G-Ring
Boss

Fig. 46

6. Install the gear B cover on the gear B and tighten the nut for mounting it. And install the pulley A so that the teeth of it contact with the outer teeth of the gear A. Then install a G ring to mount it as shown in Fig. 47.
7. Install the belts. Turn the pulley A in both direction to confirm the smooth movement of this mechanism.

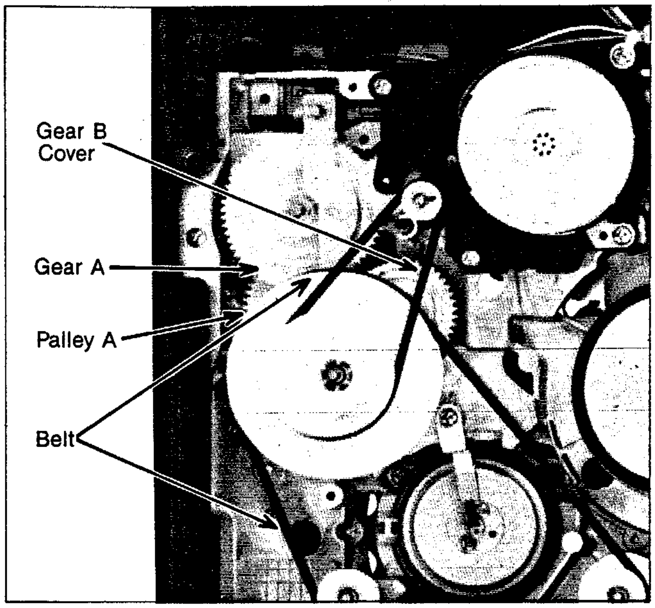

Gear B Cover
Gear A
Palley A
Belt

Fig. 47

B. Adjustment Procedures of Slide Switch

* Equipment Required:
Fine Adjustment Screwdriver ....

1. Fix. the connect plate in the condition of unloading completion.
2. Slightly loosen two screws (A) and put the fine adjustment screwdriver into the hole (B).
3. Turning the fine adjustment screw-driver, adjust the position of the slide switch so that the two V-shaped marks of the slide switch just correspond to the same position. Then tighten two screws (A).
4. Make sure that the movement of the deck is in normal condition.

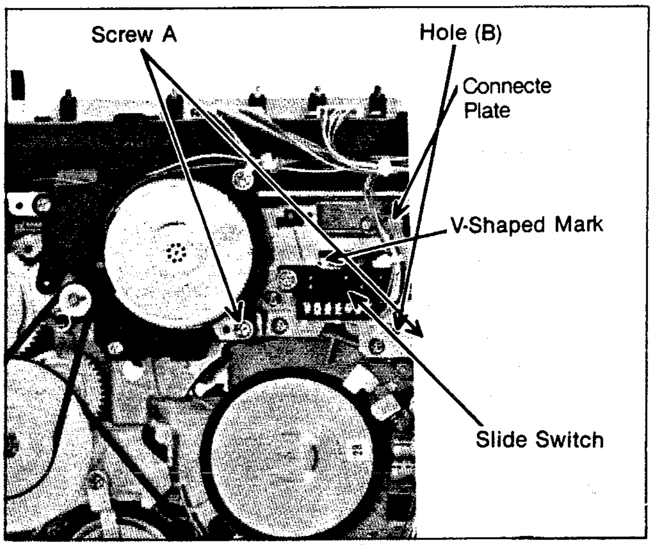

Screw A
Hole (B)
Connecte Plate
V-Shaped Mark
Slide Switch

Fig. 48

3-2-15. Replacement of Front Loading Ass'y

1. Remove the 4 Screws (A) shown in Fig. 52.
2. Pull out connector wafer from Front Loading ass'y.
3. Draw out Front Loading ass'y with great care lest it should touch main chassis bracket (L), (R).
4. Install the new one in the reverse order.

3-2-16. Replacement of F/L Door.

1. Move the F/L Door to the rightomst and disengage the left door boss from the hole provided on (L) Guide Bracket while Warping F/L Door slightly. (Refer to Fig. 49).
2. Remove Door Spring from right door boss.
3. Insert Door spring to the right door boss of new F/L Door in the direction indicated by the arrow as shown in Fig. 50.
4. Hooking one end of the Door spring on A of (R) Guide Bracket and the other end on (B) of F/L Door, insert the right door boss to the hole provided on (R) Guide Bracket, (Refer to Fig. 50).
5. Insert left door boss to the hole provided on (L) Guide Bracket while warping F/L Door slightly. In this case, make sure that Door Open lever is positioned as shown in Fig. 49.

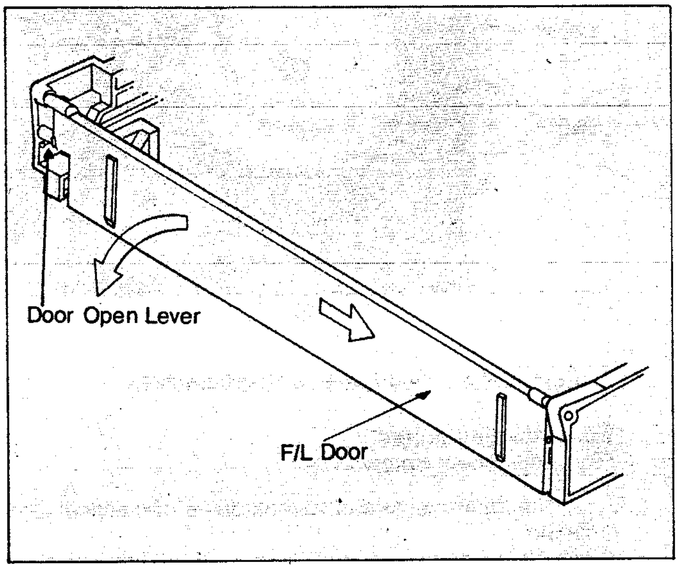

Door Open Lever
F/L Door

Fig. 49

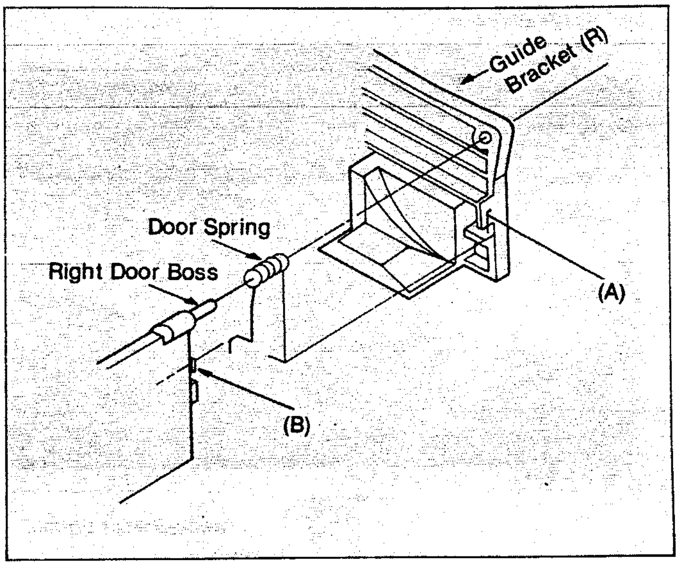

Guide Bracket (R)
Door Spring
Right Door Boss
(A)
(B)

Fig. 50

3-2-17. Gear Assembling of Front Loading Assembly

When assembling the gears of Front Loading Ass'y, make sure that worm wheel post, triangular mark of worm wheel ass'y and Screw A are on the straight line in condition of cassette holder bracket being up as shown in Fig. 51.

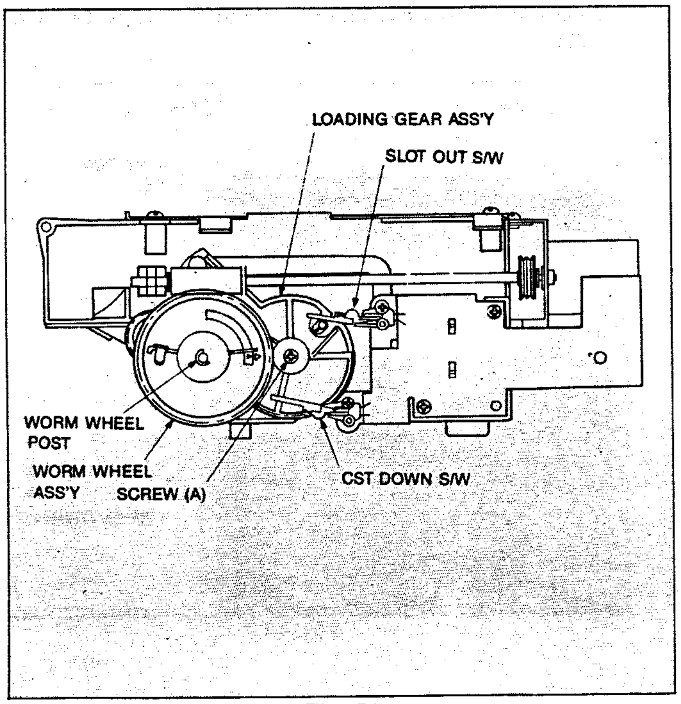

LOADING GEAR ASS'Y
SLOT OUT S/W
WORM WHEEL POST
WORM WHEEL ASS'Y
SCREW (A)
CST DOWN S/W

Fig. 51

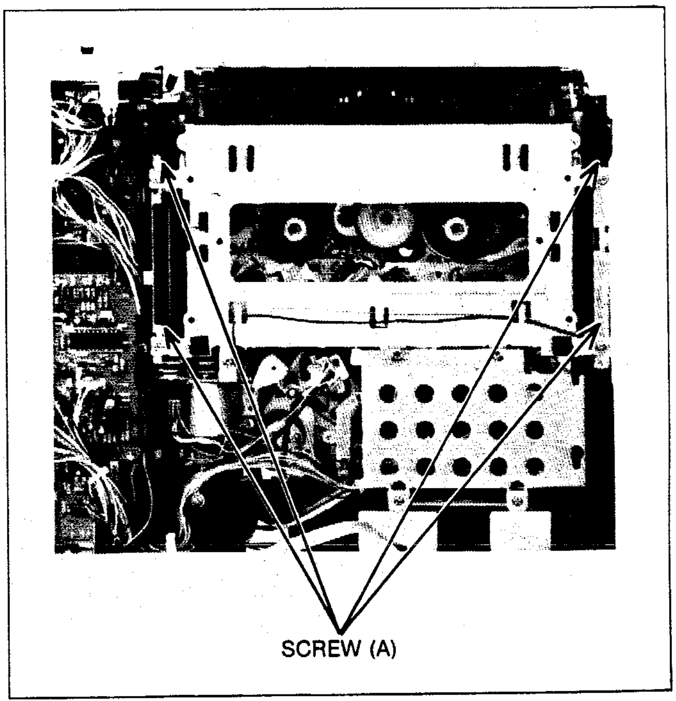


Fig. 52
VIEW FROM RIGHT SIDE

3-3. MECHANICAL DESCRIPTION.

3-3-1. Tape Transport System

Tape transport system

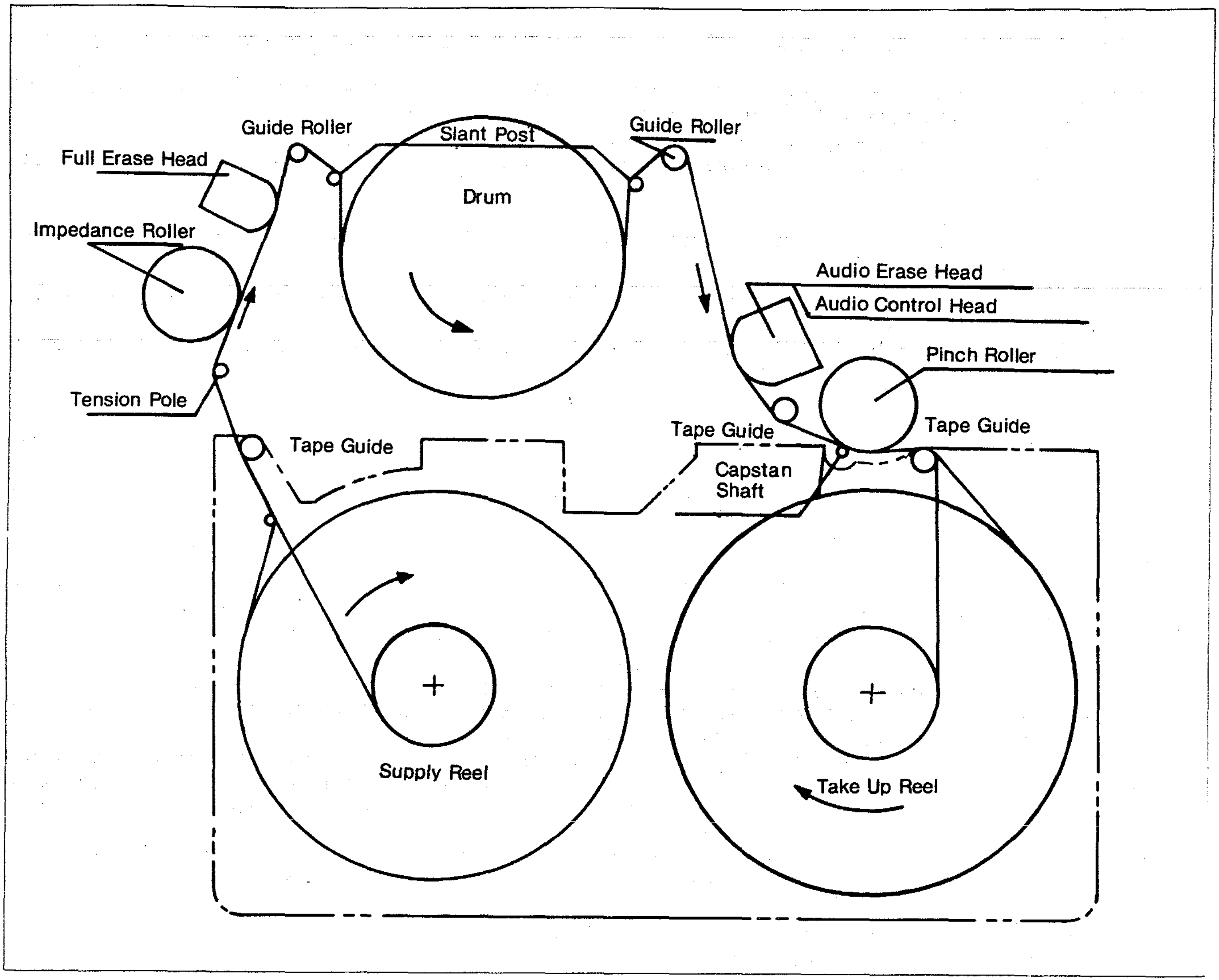

Guide Roller
Slant Post
Guide Roller
Full Erase Head
Drum
Impedance Roller
Audio Erase Head
Audio Control Head
Pinch Roller
Tension Pole
Tape Guide
Tape Guide
Tape Guide
Capstan Shaft
Supply Reel
Take Up Reel

Fig. 53

Tape thansport system

As the designation implies, the most basic function of this system is to transport the tape past the audio and video heads at the specified speed. However, since this model is a helical scan cassette type machine, numerous addition functions are rqquired, which include extracting the tape from the cassette, wappng it around the cylindrical head drum with the defined angle, and returning the tape to the cassette after it is no longer needed.

To ensure smooth operation, conformance with VHS specifications and "interchangeability" (which allows a tape recorded by one machine to be played by another machine of the same format), the positions, heights and inclination angles of the various fixed and movable tape guides must be adjusted and maintained to close tolerances. The most stringent and difficult of these adjustments have been performed at the factory under controlled conditions. There-fore, in service, it is usually only necessary to perform minor adjustments to compensate for wear and after replacing certain parts.

The following description covers the mechanical states for the various operating modes. An adequate understanding of the mechanical processes is essential before attempting to repair or adjust the transport system.

3-3-2. Explanation of Modes

1) STOP

When the cassette tape is placed on the reel table completely, the high signal of slot-in-switch makes the LC M/T rotate CW. By the rotation of LC M/T rotates the cam gear, which moves the connect plate until the slide switch detects the stop mode, in which the LC M/T is stopped.

2) FF (REW)

When the FF (REW) button is pressed, the LC M/T starts to rotate CW and its rotation is transmitted to the cam gear via the pulley B and pulley A.
The cam gear moves the connect plate in the direction indicated by the arrow as shown in Fig. 57. By the movement of the connect plate the following operations are performed.

- The pinch lever is moved in the direction indicated by the arrow as shown in Fig. 54.
- As the sub brake adjust lever moves in the direction indicated by the arrow as shown in Fig. 57, the s-sub braking force becomes weak.
- T sub brake is released.
- The connect sub plate starts to be moved when the connect plate is moved and the convex part of the connect plate is geared with the connect sub plate.

By the movement of the connect sub plate, supply and take up reel brakes are released as shown in Fig. 57 and ratchet lock lever locks the brake gear and brake pinion.
When the slide switch detects the FF (REW) mode, the LC Motor is stopped. And simultaneously reel motor starts to rotate cw or ccw in accordance with the direction of FF or REWIND.

3) PLAY

When the play button is pressed, the LC M/T starts to rotate cw. The rotation of LC M/T is transmitted to the cam gear, which is rotated cw.
As the cam gear rotates cw, the rack gear is rotated in the direction indicated by the arrow as shown in Fig. 54 according to the increase of the radius of cam surface.
And the (L) Loading gear and (R) Loading gear start to be rotated cw and ccw respectively by the gear (B) which is rotated by the rack gear.
Then the pole base S ass'y and T ass'y extract the tape from the cassette moved along the guide slot on the slide plate by the (L), (R) loading lever ass'y which is driven by the Loading gear (L), R).
As the connect plate is moved by the rotation of the cam gear, the following operations are performed.

- The tension arm starts to be rotated ccw as shown in Fig. 55.
- The pinch lever is moved slightly to the capstan shaft asshown in Fig. 54.
- The supply and take up reel brakes are released and the subbraking force becomes weak by the ccw rotation os s-sub brake adjust lever and the take up sub brake is actuated on the take up reel table.
- The connect sub plate is separated from the connect plate and returns to the position whch corresponds to the stop mode so thalt the ratchet lock lever may unlock the brake gear and brake pinion and the idler may separate from the take up reel table.
- The pinch roller is pressed to the capstan shaft and the sub brakes (S, T) are relesed. Idler lever is driven to contact with T-U reel table.
- The band brake ass'y is pulled by the tension arm and contacts with the supply reel, which results in applying the back tension. For this reason the tension arm stays at the position where the tensile strength of the tape is balanced with the strength of the tension arm spring.
  When the slide sw detects the play mode, LC M/T is stopped.
  And simultaneously reel M/T and capstan M/T starts to rotate.

4) CUE

The cue mode can be obtained by pushing the FF button in the play mode. The mechanical position of slide switch in the cue mode is same as that in the play mode. In cue mode capstan M/T rotates three times as rapidly as in standard play mode and nine times as rapidly as in extended play mode.

5) REVIEW

The review mode can be obtained by pushing the REW button in the play mode. Like the above mentioned mode, LC Motor is to rotate until the slide switch detects the review mode.
The mechanical operations performed by the connect plate which is moved by the LC M/T are as follows.

- The tension arm is rotated cw so that the band brake ass'y is released from the supply reel table.
- The S, T sub brakes are actuated on the S, T reel tables respectively.

When the cam switch detects the review mode, the LC M/T is stopped and at the nearly same time, Reel M/T and capstan M/T start to rotate in the reverse direction.

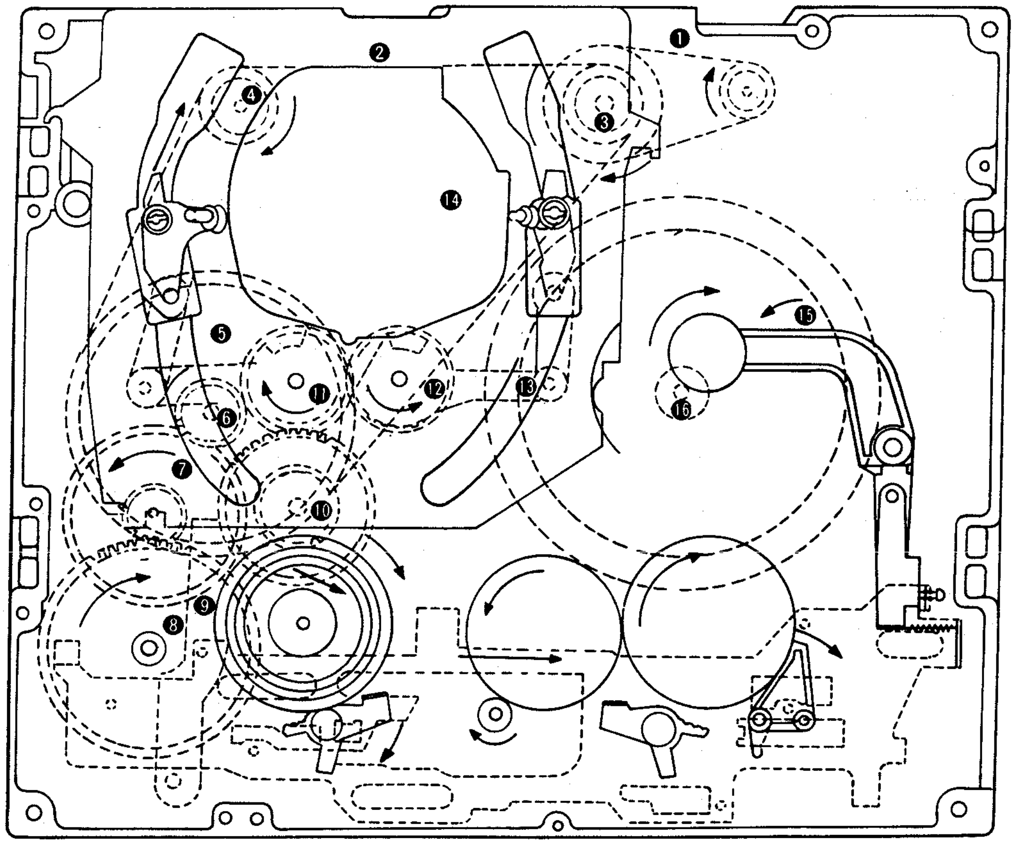
6) UN-LOADING Fig. 56

When the stop button is pressed in the play mode the capstan M/T is stopped and the LC M/T starts to rotate ccw. The rotation of LC M/T is transmitted to the cam gear, which is rotated ccw as shown in Fig. 58.
As the cam gear rotates ccw, the rack gear is rotated in the direction indicated by the arrow as shown in Fig. 58 according to the decrease of the radius of cam surface.
And the (L) loading gear and (R) loading gear start to be rotated ccw and cw respectively by the gear B which is rotated by the rack gear.
While (L), (R) loading gear are rotated, the reel motor rotates S reel table ccw for rewinding tape.

- The tension arm starts to be rotated cw as shown in Fig. 59.
- The pinch lever is moved in the direction indicated by the arrow as shown in Fig. 58.
- The supply and take up reel brakes are moved in the direction indicated by the arrow as shown in Fig. 58 and actuated on the S and T-U reel table.
- The S sub brake and T sub brake are actuated on the S and T-U reel table.

When the slide switch detects the stop mode, the LC M/T is stopped.

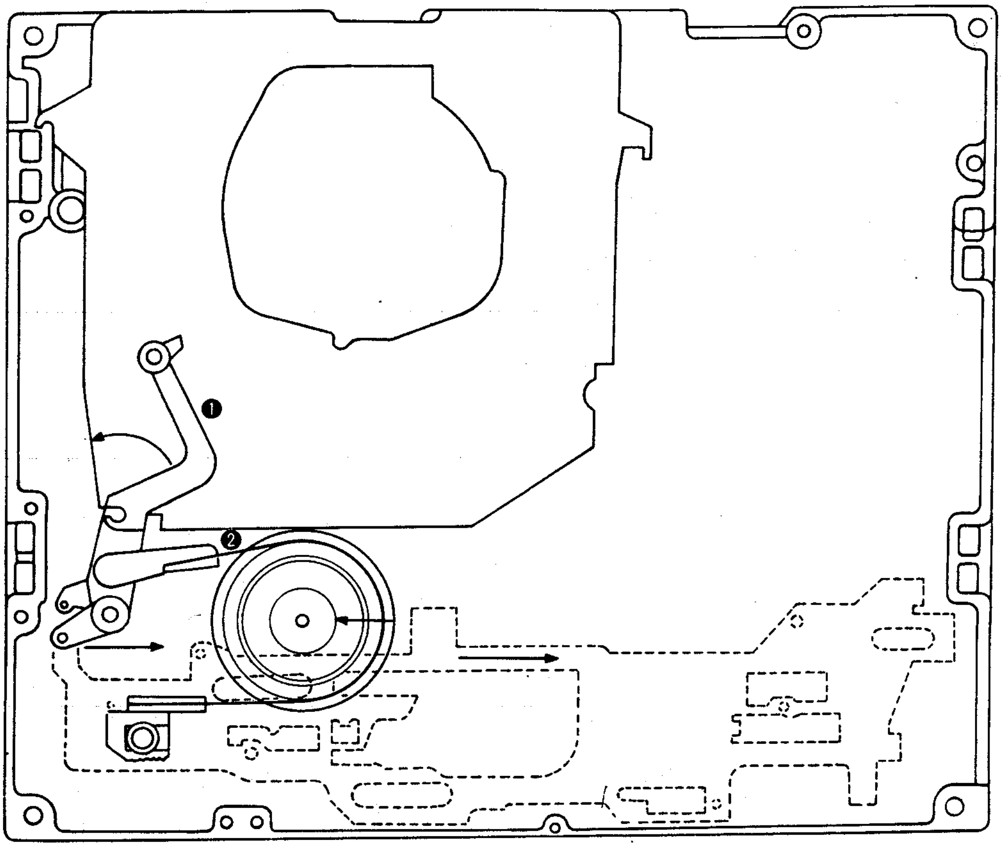
(1) LOADING MODE (I)



① L/C Belt
② Plate Slide
③ Pulley B
④ Guide Pulley
⑤ Pulley A
⑥ L Loading Lever
⑦ Gear A
⑧ Cam Gear
⑨ Rack Gear
⑩ Gear B
⑪ L Loading Gear
⑫ R Loading Gear
⑬ R Loading Lever
⑭ Guide Roller
⑮ Pinch Lever
⑯ Capstan Shaft

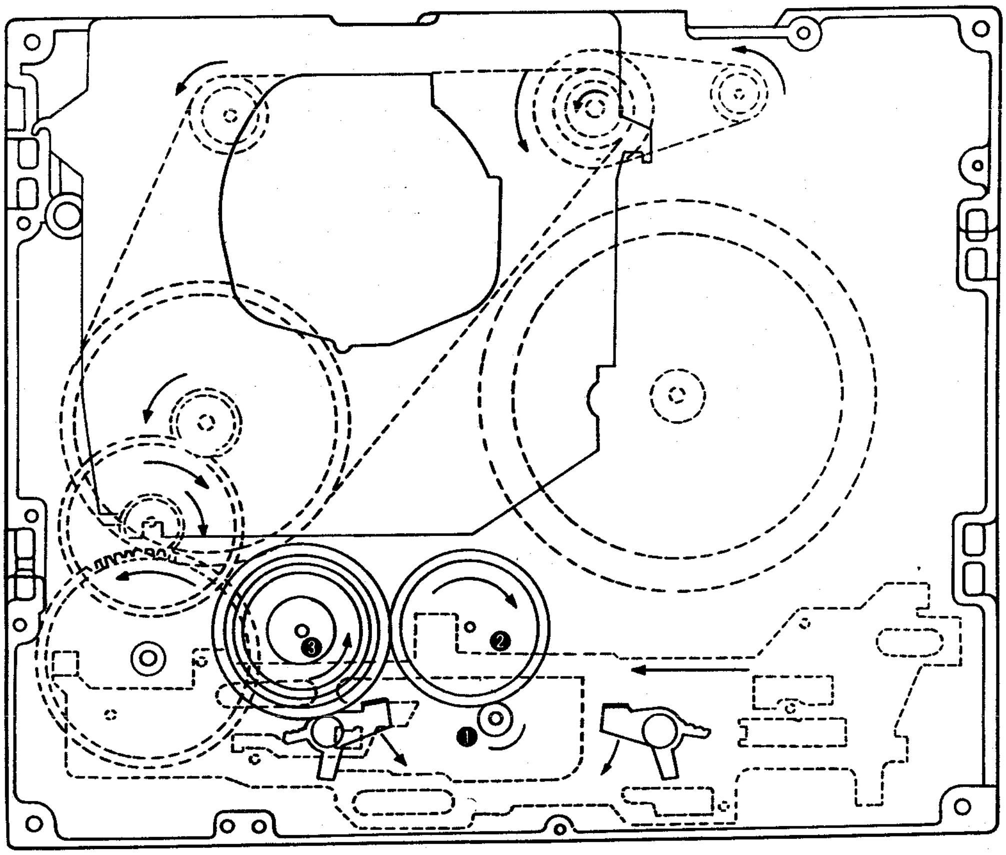
Fig. 54

(2) LOADING MODE (II)



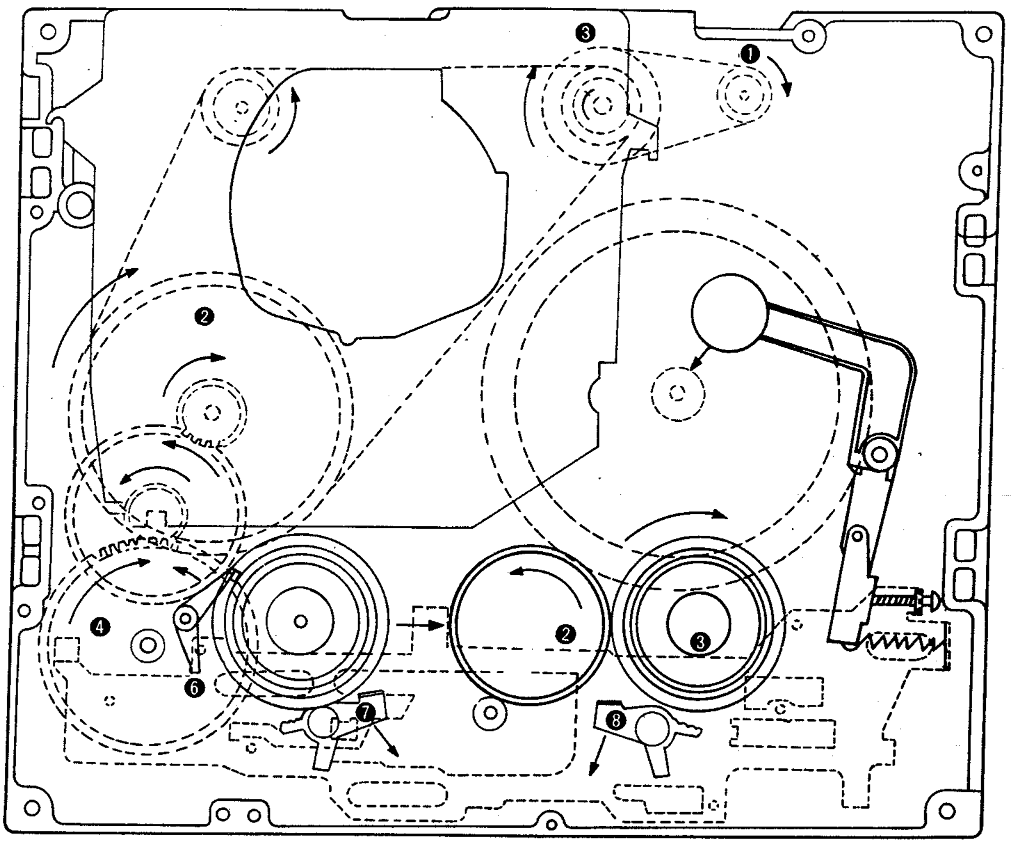
① Tension Arm
② Band Brake

(3) REWIND MODE.



① Reed Motor
② Idler
③ T/U Reel

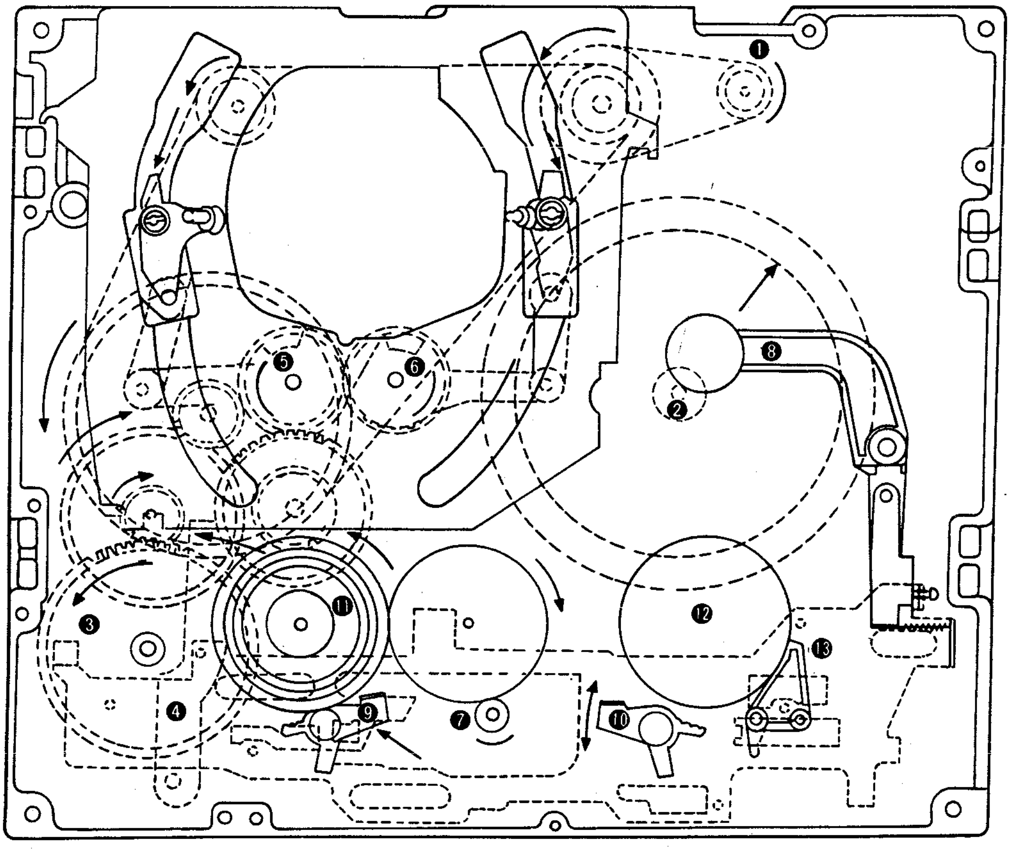
(4) FAST FORWARD MODE



① Reel Motor
② Pulley A
③ Pulley B
④ Cam Gear
⑤ Connect Plate
⑥ S Sub Brake
⑦ S Reel Brake
⑧ T Reel Brake

Fig. 57

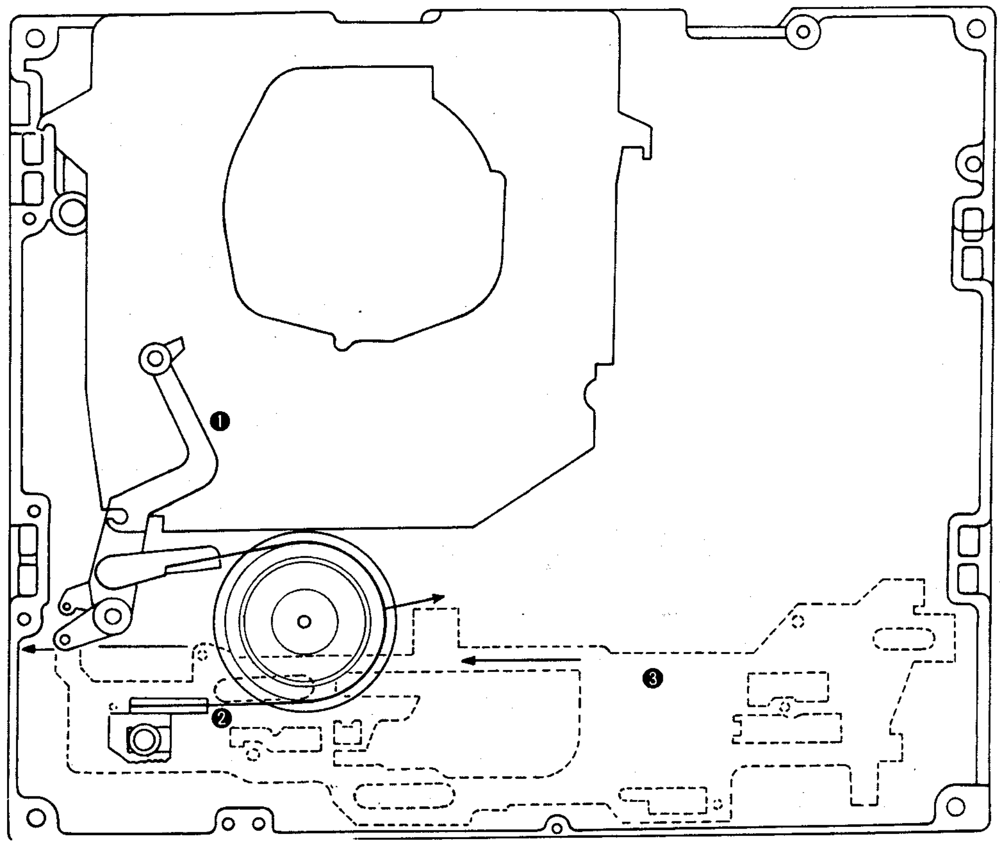
(5) UNLOADING MODE (I)



① L/C Motor
② Capstan Motor
③ Cam Gear
④ Rack Gear
⑤ L Loading Gear
⑥ R Loading Gear
⑦ Pinch Lever
⑧ Pinch Brake
⑨ S Reel Brake
⑩ T Reel Brake
⑪ S Reel Talbe
⑫ T/U Reel Table
⑬ T Sub Brake

Fig. 58

(6) UNLOADING MODE (II)



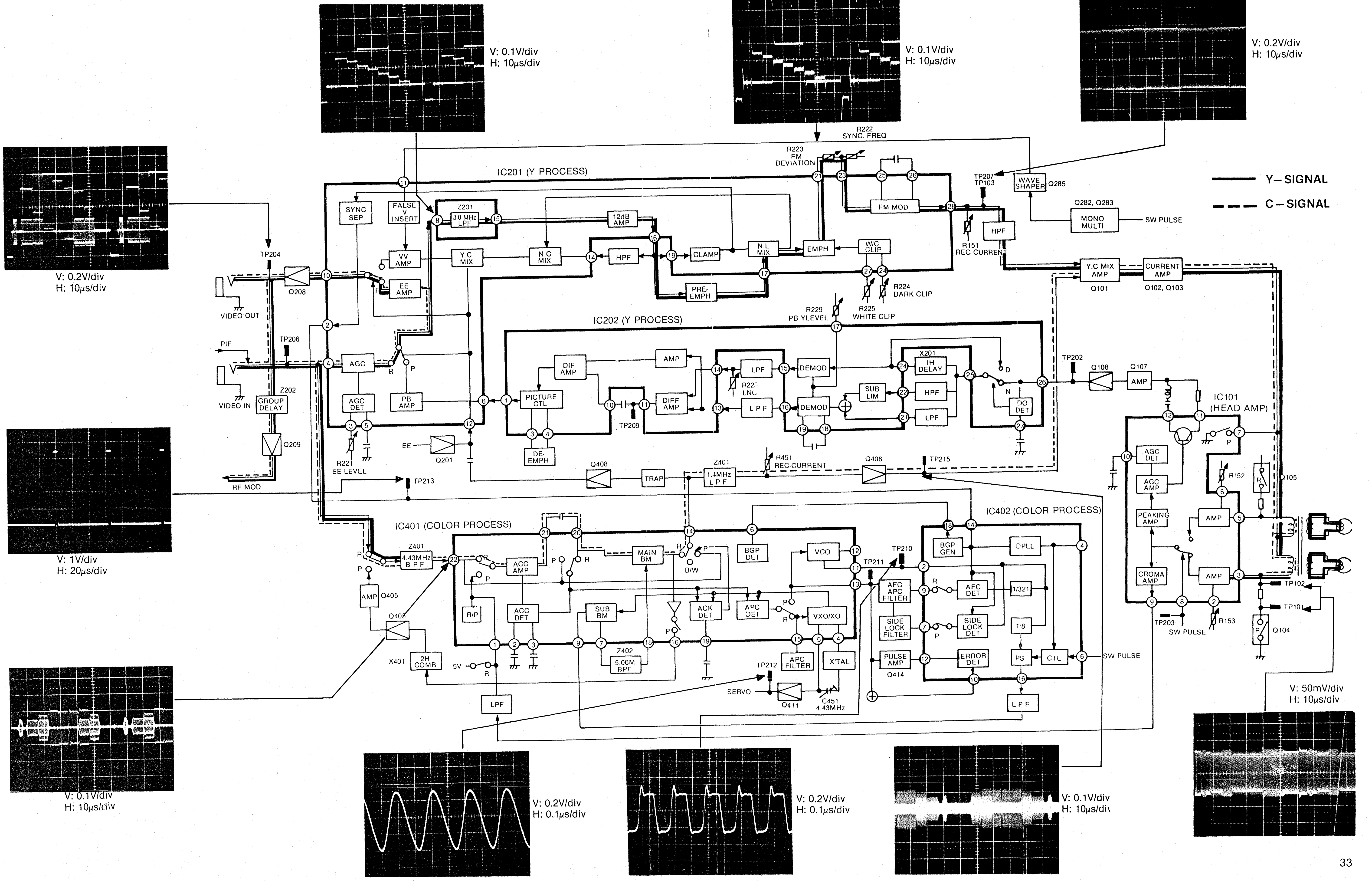
① Tension Arm
② Band Brake
③ Connect Plate

Fig. 59

SECTION 4.

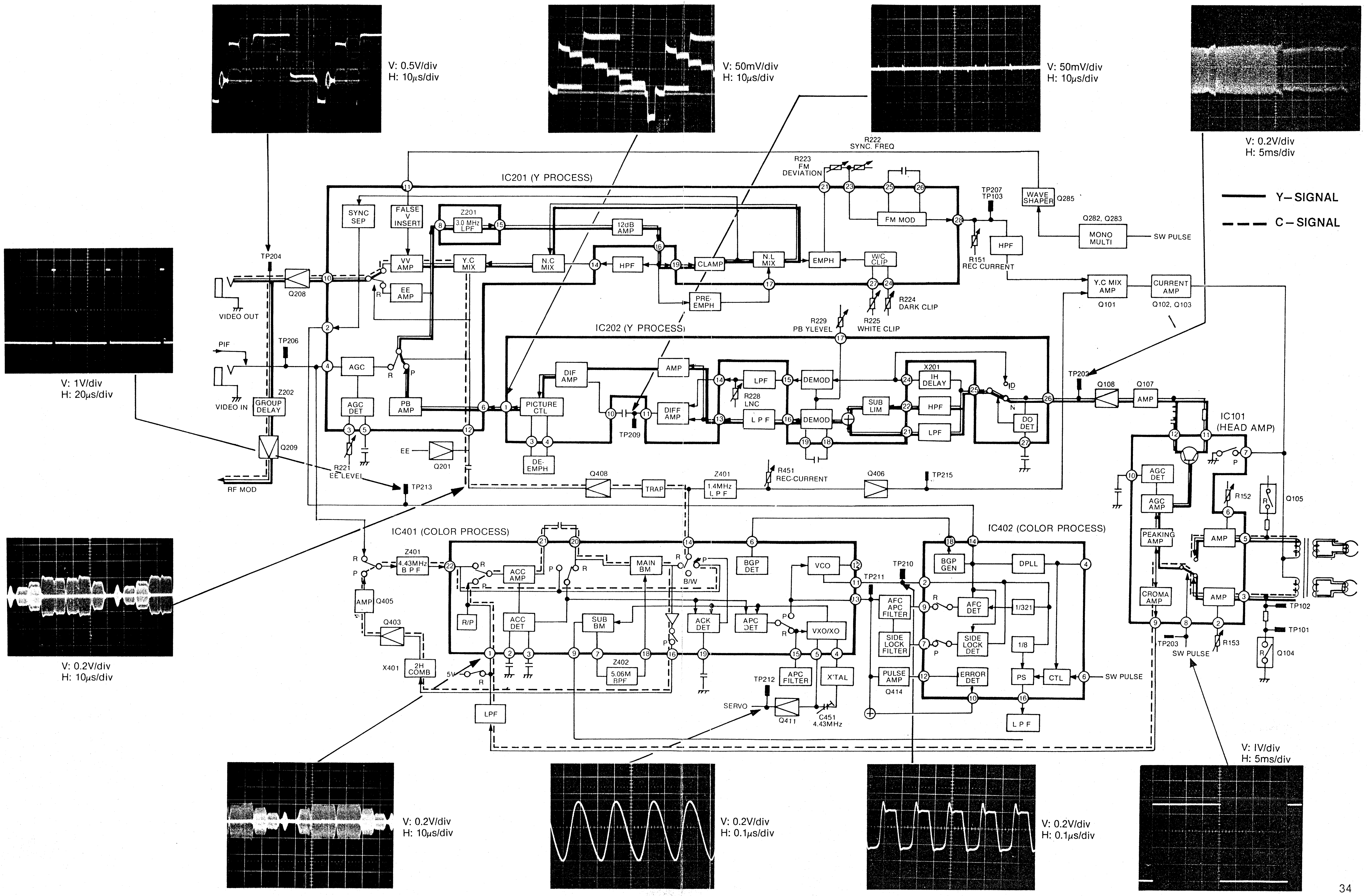
BLOCK DIAGRAM AND CIRCUIT BOARD

4-1 VIDEO BLOCK DIAGRAM (REC MODE)



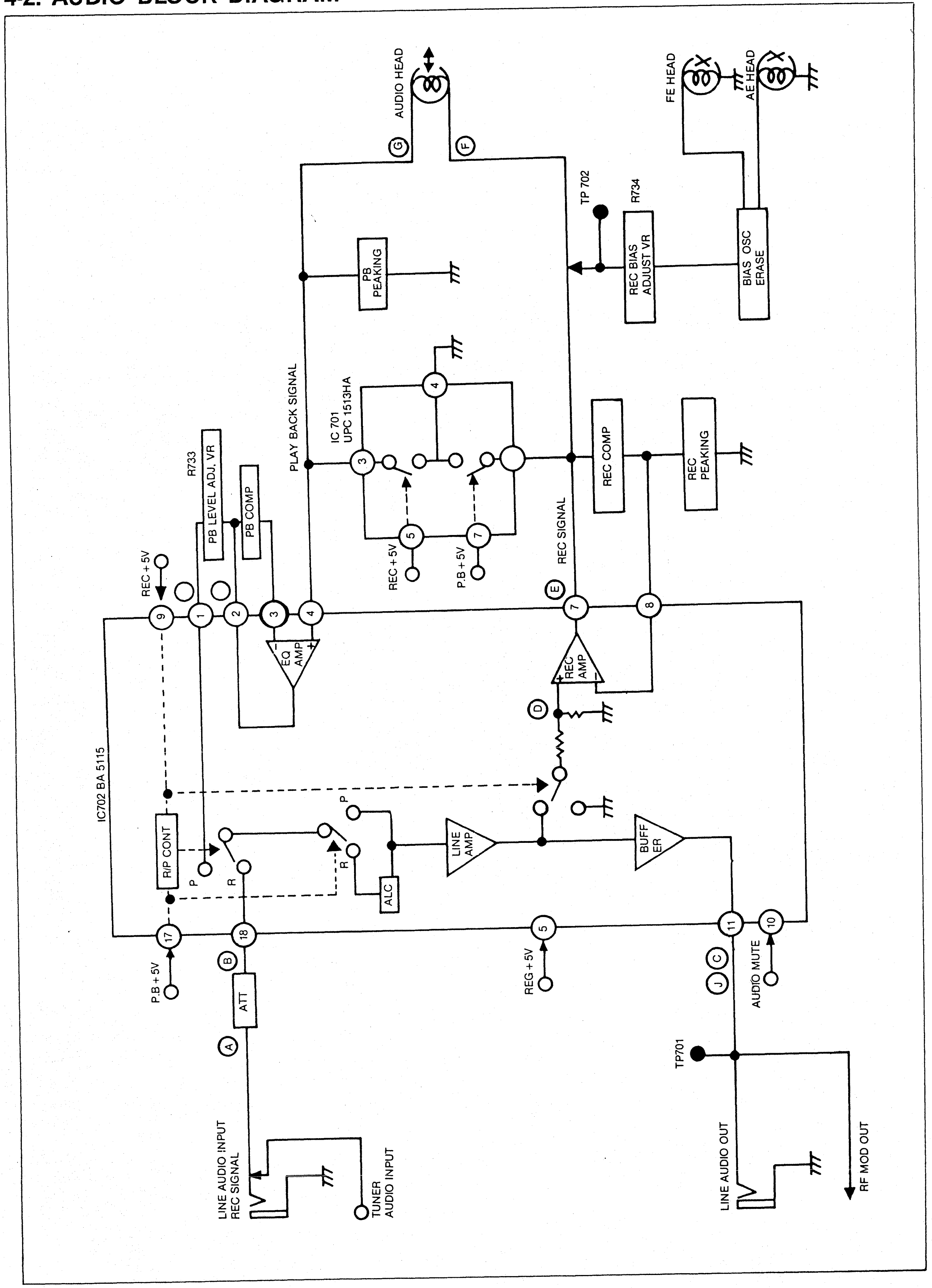
V: 0.1V/div
H: 10μs/div
V: 0.1V/div
H: 10μs/div
V: 0.2V/div
H: 10μs/div
V: 0.2V/div
H: 10μs/div
V: 1V/div
H: 20μs/div
V: 0.1V/div
H: 10μs/div
V: 0.2V/div
H: 0.1μs/div
V: 0.2V/div
H: 0.1μs/div
V: 0.1V/div
H: 10μs/div
V: 50mV/div
H: 10μs/div
Y–SIGNAL
C–SIGNAL
IC201 (Y PROCESS)
IC202 (Y PROCESS)
IC401 (COLOR PROCESS)
IC402 (COLOR PROCESS)
IC101
(HEAD AMP)
R222
SYNC. FREQ
R223
FM
DEVIATION
SYNC
SEP
FALSE
V
INSERT
Z201
3.0 MHz
LPF
12dB
AMP
FM MOD
TP207
TP103
WAVE
SHAPER
Q285
Q282, Q283
MONO
MULTI
SW PULSE
VV
AMP
Y.C
MIX
N.C
MIX
HPF
CLAMP
N.L
MIX
EMPH
W/C
CLIP
HPF
R151
REC CURRENT
EE
AMP
PRE-
EMPH
R224
DARK CLIP
R225
WHITE CLIP
R229
PB YLEVEL
Y.C MIX
AMP
Q101
CURRENT
AMP
Q102, Q103
TP204
Q208
VIDEO OUT
PIF
TP206
VIDEO IN
Z202
GROUP
DELAY
Q209
RF MOD
AGC
AGC
DET
PB
AMP
R221
EE LEVEL
EE
Q201
DIF
AMP
AMP
PICTURE
CTL
DE-
EMPH
TP209
DIFF
AMP
LPF
R227
LNC
L P F
DEMOD
DEMOD
SUB
LIM
X201
IH
DELAY
HPF
LPF
DO
DET
TP202
Q108
Q107
AMP
TP213
Q408
TRAP
Z401
1.4MHz
L P F
R451
REC CURRENT
Q406
TP215
AGC
DET
AGC
AMP
PEAKING
AMP
CROMA
AMP
AMP
AMP
R152
Q105
TP102
TP101
Q104
TP203
SW PULSE
R153
Z401
4.43MHz
B P F
AMP
Q405
Q408
ACC
AMP
ACC
DET
R/P
MAIN
BM
SUB
BM
B/W
BGP
DET
ACK
DET
APC
DET
VCO
VXO/XO
X'TAL
APC
FILTER
TP212
SERVO
Q411
C451
4.43MHz
X401
2H
COMB
5V
Z402
5.06M
BPF
LPF
TP210
TP211
BGP
GEN
DPLL
AFC
APC
FILTER
AFC
DET
1/321
SIDE
LOCK
FILTER
SIDE
LOCK
DET
1/8
PULSE
AMP
Q414
ERROR
DET
PS
CTL
SW PULSE
L P F

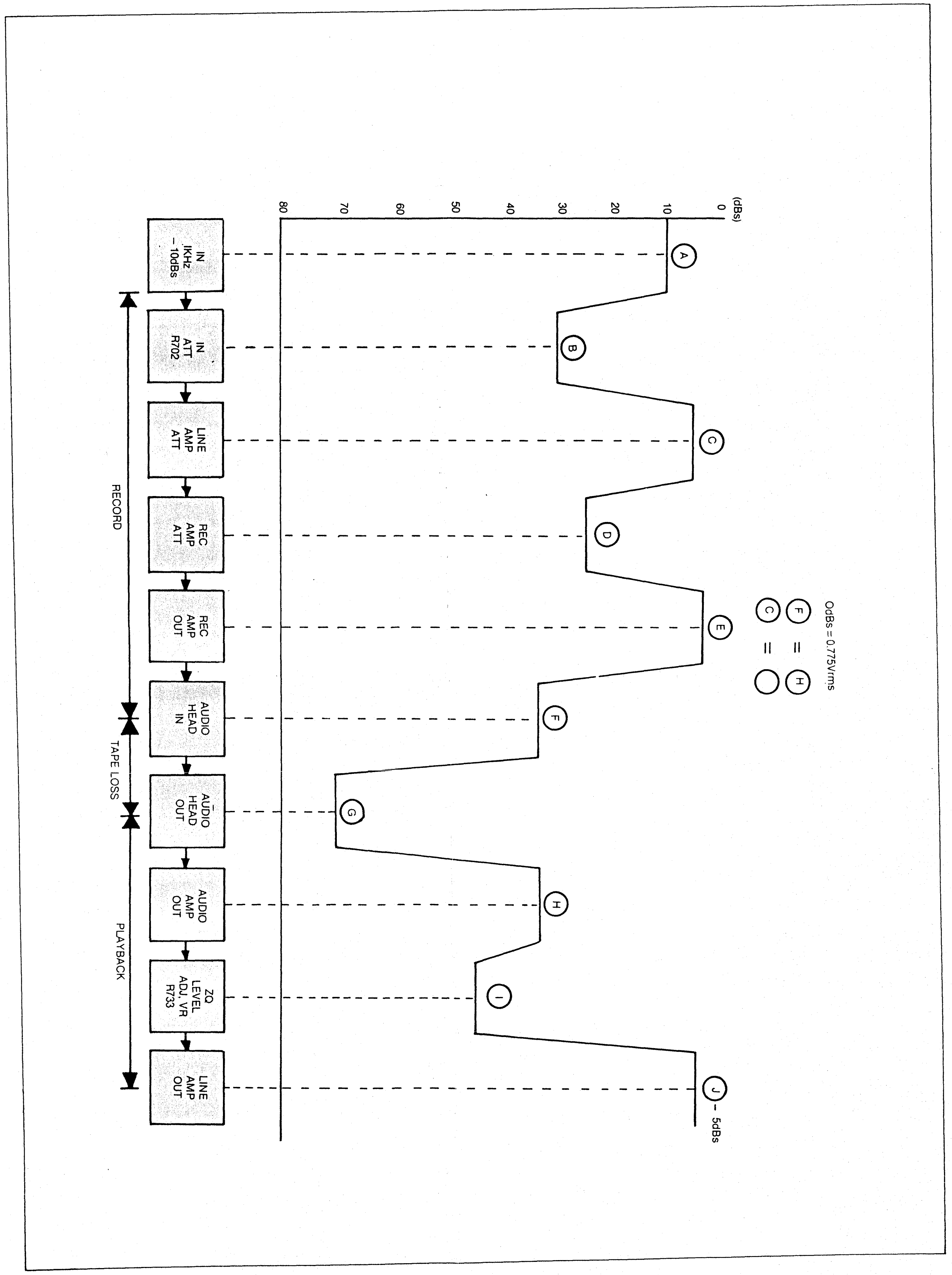
VIDEO BLOCK DIAGRAM (PB MODE)



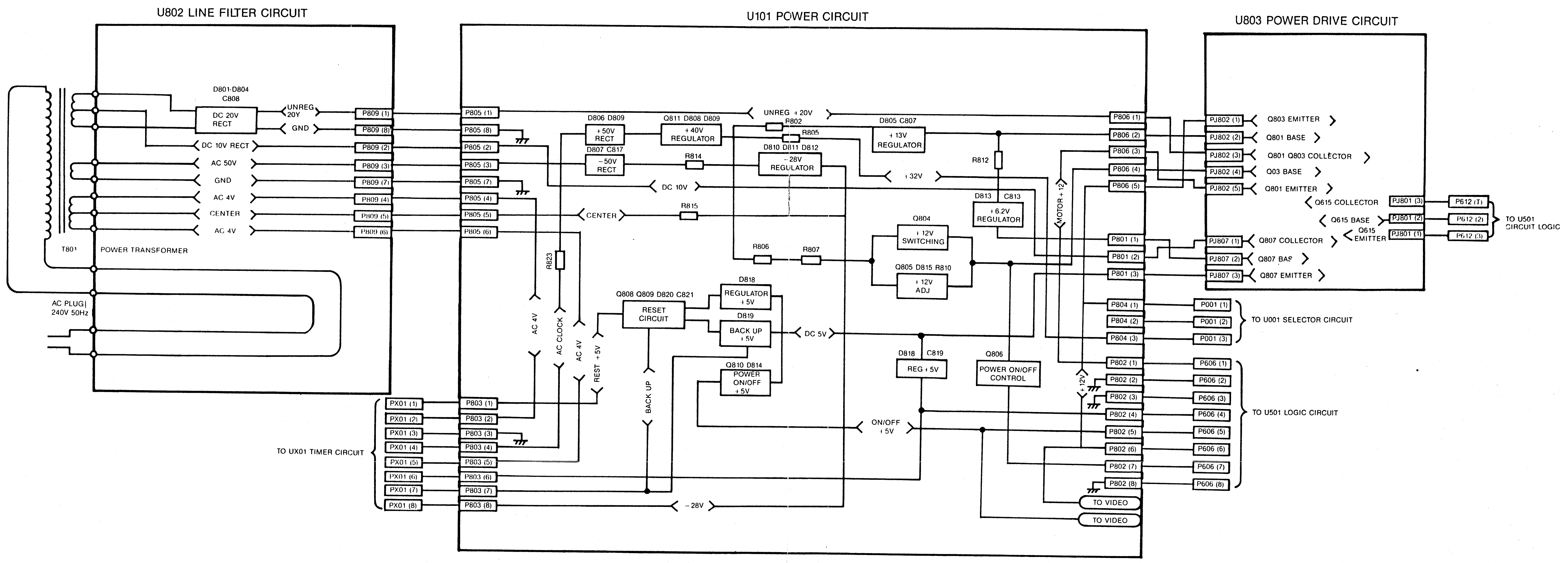
V: 0.5V/div
H: 10μs/div
V: 50mV/div
H: 10μs/div
V: 50mV/div
H: 10μs/div
V: 0.2V/div
H: 5ms/div
V: 1V/div
H: 20μs/div
V: 0.2V/div
H: 10μs/div
V: 0.2V/div
H: 10μs/div
V: 0.2V/div
H: 0.1μs/div
V: 0.2V/div
H: 0.1μs/div
V: IV/div
H: 5ms/div
Y-SIGNAL
C-SIGNAL
IC201 (Y PROCESS)
IC202 (Y PROCESS)
IC401 (COLOR PROCESS)
IC402 (COLOR PROCESS)
IC101 (HEAD AMP)
R222 SYNC. FREQ
R223 FM DEVIATION
SYNC SEP
FALSE V INSERT
Z201 3.0 MHz LPF
12dB AMP
FM MOD
TP207 TP103
WAVE SHAPER
Q285
Q282, Q283
MONO MULTI
SW PULSE
TP204
Q208
VIDEO OUT
VV AMP
Y.C MIX
N.C MIX
HPF
CLAMP
N.L MIX
EMPH
W/C CLIP
HPF
R151 REC CURRENT
Y.C MIX AMP
Q101
CURRENT AMP
Q102, Q103
EE AMP
PRE-EMPH
R224 DARK CLIP
R229 PB YLEVEL
R225 WHITE CLIP
PIF
TP206
VIDEO IN
Z202
GROUP DELAY
AGC
AGC DET
PB AMP
DIF AMP
AMP
PICTURE CTL
DIFF AMP
TP209
DE-EMPH
LPF
R228 LNC
L P F
DEMOD
DEMOD
SUB LIM
X201
IH DELAY
HPF
LPF
ID
N
DO DET
TP203
Q108
Q107
AMP
Q209
R221 EE LEVEL
EE
Q201
TP213
RF MOD
Q408
TRAP
Z401 1.4MHz L P F
R451 REC-CURRENT
Q406
TP215
R
P
Z401 4.43MHz B P F
AMP Q405
Q403
X401
2H COMB
5V
R/P
ACC AMP
ACC DET
SUB BM
Z402 5.06M BPF
MAIN BM
B/W
ACK DET
APC DET
BGP DET
VCO
VXO/XO
APC FILTER
X'TAL
TP212
SERVO
Q411
C451 4.43MHz
LPF
TP211
TP210
BGP GEN
DPLL
AFC APC FILTER
AFC DET
1/321
SIDE LOCK FILTER
SIDE LOCK DET
1/8
PULSE AMP
Q414
ERROR DET
PS
CTL
SW PULSE
L P F
AGC DET
AGC AMP
PEAKING AMP
CROMA AMP
AMP
AMP
R152
Q105
TP102
TP101
TP203
SW PULSE
R153
Q104

4-2. AUDIO BLOCK DIAGRAM

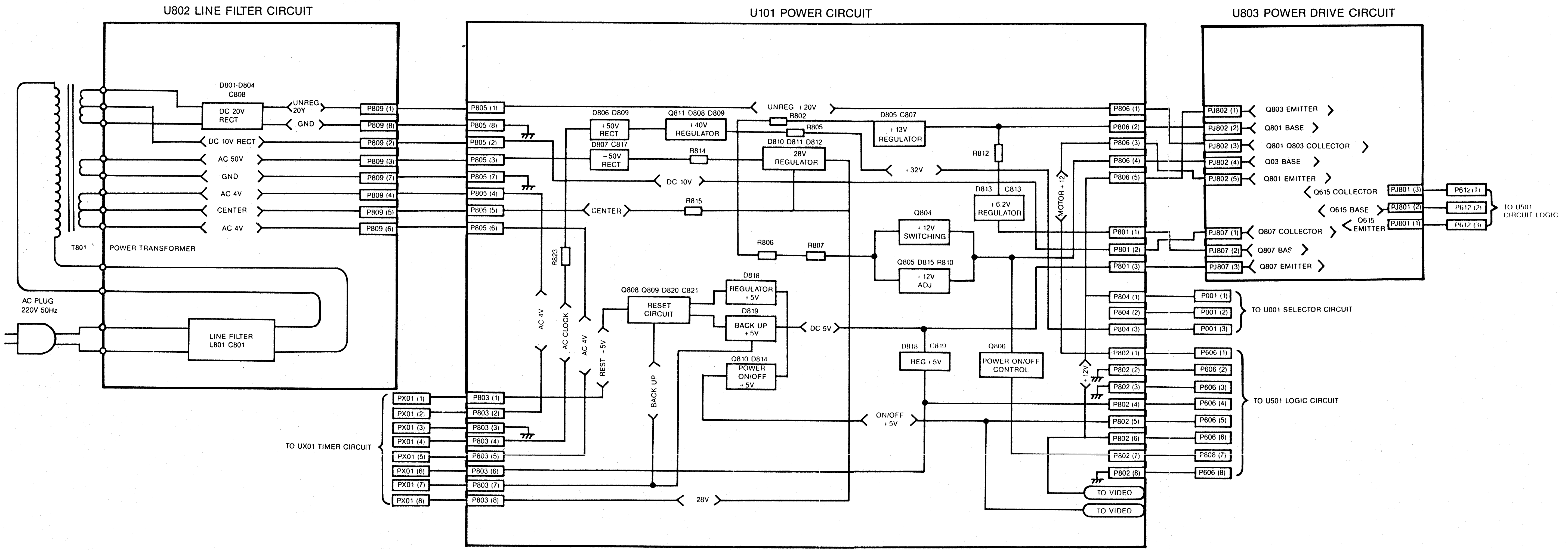

AUDIO HEAD
FE HEAD
AE HEAD
TP 702
R734
REC BIAS ADJUST VR
BIAS OSC ERASE
PB PEAKING
PLAY BACK SIGNAL
IC 701 UPC 1513HA
REC COMP
REC PEAKING
R733
PB LEVEL ADJ. VR
PB COMP
REC + 5V
P.B + 5V
REC SIGNAL
EQ AMP
REC AMP
IC702 BA 5115
R/P CONT
LINE AMP
ALC
BUFF ER
ATT
REG + 5V
AUDIO MUTE
TP701
LINE AUDIO INPUT REC SIGNAL
TUNER AUDIO INPUT
LINE AUDIO OUT
RF MOD OUT
A
B
C
D
E
F
G
J
P
R



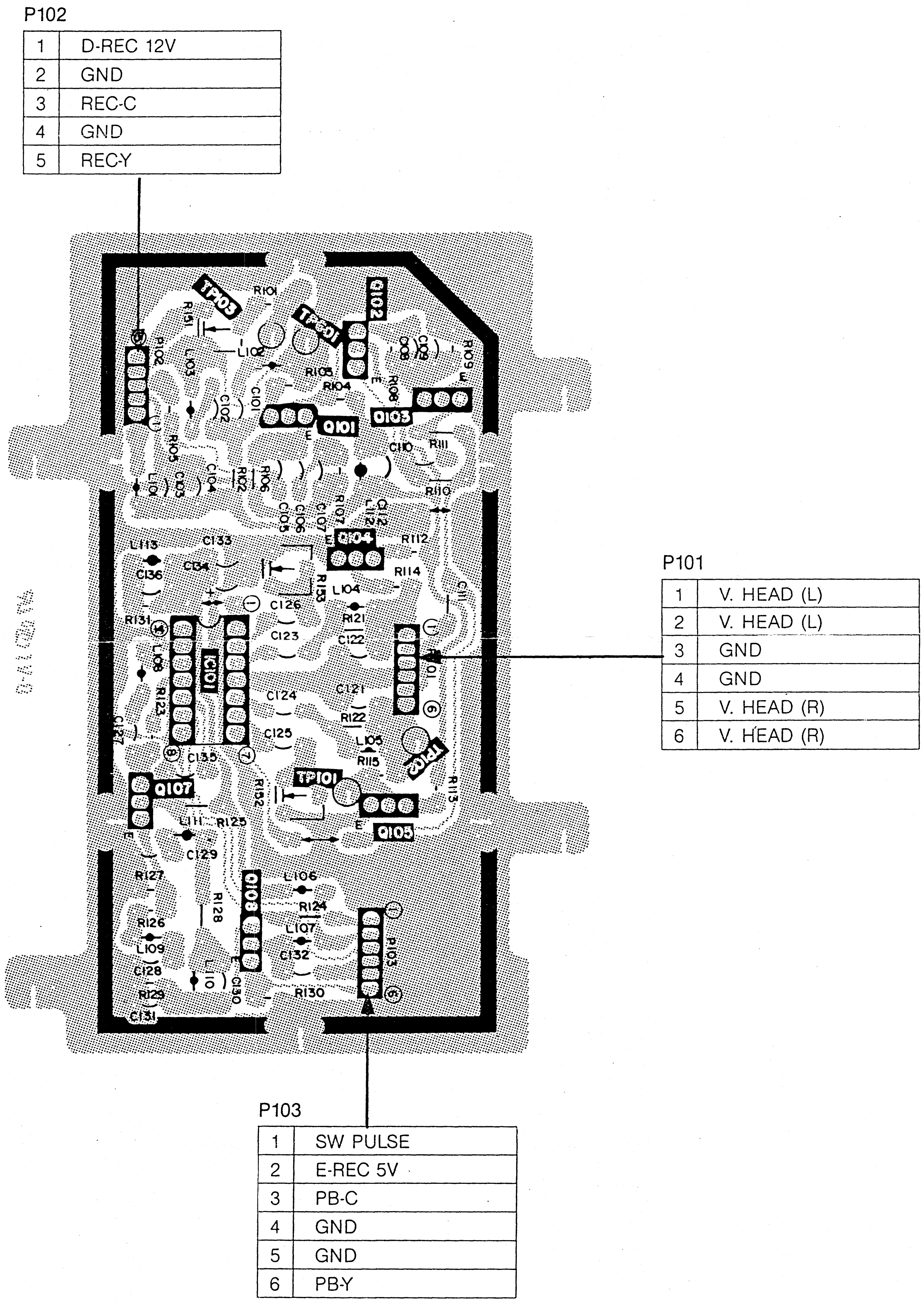
4-3 POWER SUPPLY BLOCK DIAGRAM (30 DAP I)


U802 LINE FILTER CIRCUIT
D801-D804
C808
DC 20V RECT
UNREG 20Y
GND
DC 10V RECT
AC 50V
GND
AC 4V
CENTER
AC 4V
P809 (1)
P809 (8)
P809 (2)
P809 (3)
P809 (7)
P809 (4)
P809 (5)
P809 (6)
T801
POWER TRANSFORMER
AC PLUG
240V 50Hz
U101 POWER CIRCUIT
P805 (1)
P805 (8)
P805 (2)
P805 (3)
P805 (7)
P805 (4)
P805 (5)
P805 (6)
D806 D809
+50V RECT
D807 C817
-50V RECT
Q811 D808 D809
+40V REGULATOR
R814
D810 D811 D812
-28V REGULATOR
UNREG +20V
R802
R805
D805 C807
+13V REGULATOR
+32V
DC 10V
CENTER
R815
R812
D813 C813
+6.2V REGULATOR
Q804
+12V SWITCHING
R806
R807
Q805 D815 R810
+12V ADJ
MOTOR +12
R823
D818
REGULATOR +5V
Q808 Q809 D820 C821
RESET CIRCUIT
D819
BACK UP +5V
DC 5V
Q810 D814
POWER ON/OFF +5V
D818 C819
REG +5V
Q806
POWER ON/OFF CONTROL
AC 4V
AC CLOCK
AC 4V
REST +5V
BACK UP
ON/OFF +5V
-28V
+12V
P806 (1)
P806 (2)
P806 (3)
P806 (4)
P806 (5)
P801 (1)
P801 (2)
P801 (3)
P804 (1)
P804 (2)
P804 (3)
P802 (1)
P802 (2)
P802 (3)
P802 (4)
P802 (5)
P802 (6)
P802 (7)
P802 (8)
TO VIDEO
TO VIDEO
P803 (1)
P803 (2)
P803 (3)
P803 (4)
P803 (5)
P803 (6)
P803 (7)
P803 (8)
PX01 (1)
PX01 (2)
PX01 (3)
PX01 (4)
PX01 (5)
PX01 (6)
PX01 (7)
PX01 (8)
TO UX01 TIMER CIRCUIT
U803 POWER DRIVE CIRCUIT
PJ802 (1)
PJ802 (2)
PJ802 (3)
PJ802 (4)
PJ802 (5)
Q803 EMITTER
Q801 BASE
Q801 Q803 COLLECTOR
Q03 BASE
Q801 EMITTER
Q615 COLLECTOR
Q615 BASE
Q615 EMITTER
PJ801 (3)
PJ801 (2)
PJ801 (1)
P612 (1)
P612 (2)
P612 (3)
TO U501 CIRCUIT LOGIC
PJ807 (1)
PJ807 (2)
PJ807 (3)
Q807 COLLECTOR
Q807 BAS
Q807 EMITTER
P001 (1)
P001 (2)
P001 (3)
TO U001 SELECTOR CIRCUIT
P606 (1)
P606 (2)
P606 (3)
P606 (4)
P606 (5)
P606 (6)
P606 (7)
P606 (8)
TO U501 LOGIC CIRCUIT

4-3 POWER SUPPLY BLOCK DIAGRAM
(30 DAP GAA, 30 DAP GBA 50 DAP GAB)


U802 LINE FILTER CIRCUIT
U101 POWER CIRCUIT
U803 POWER DRIVE CIRCUIT
D801-D804
C808
DC 20V
RECT
UNREG
20Y
GND
DC 10V RECT
AC 50V
GND
AC 4V
CENTER
AC 4V
T801
POWER TRANSFORMER
AC PLUG
220V 50Hz
LINE FILTER
L801 C801
P809 (1)
P809 (8)
P809 (2)
P809 (3)
P809 (7)
P809 (4)
P809 (5)
P809 (6)
P805 (1)
P805 (8)
P805 (2)
P805 (3)
P805 (7)
P805 (4)
P805 (5)
P805 (6)
TO UX01 TIMER CIRCUIT
PX01 (1)
PX01 (2)
PX01 (3)
PX01 (4)
PX01 (5)
PX01 (6)
PX01 (7)
PX01 (8)
P803 (1)
P803 (2)
P803 (3)
P803 (4)
P803 (5)
P803 (6)
P803 (7)
P803 (8)
D806 D809
+50V
RECT
D807 C817
−50V
RECT
Q811 D808 D809
+40V
REGULATOR
UNREG +20V
R802
R805
R814
D810 D811 D812
28V
REGULATOR
DC 10V
CENTER
R815
D805 C807
+13V
REGULATOR
+32V
R812
D813 C813
+6.2V
REGULATOR
MOTOR +12
Q804
+12V
SWITCHING
Q805 D815 R810
+12V
ADJ
R806
R807
R823
AC 4V
AC CLOCK
AC 4V
REST +5V
Q808 Q809 D820 C821
RESET
CIRCUIT
D818
REGULATOR
+5V
D819
BACK UP
+5V
DC 5V
Q810 D814
POWER
ON/OFF
+5V
BACK UP
D818 C819
REG +5V
Q806
POWER ON/OFF
CONTROL
ON/OFF
+5V
28V
+12V
TO VIDEO
TO VIDEO
P806 (1)
P806 (2)
P806 (3)
P806 (4)
P806 (5)
P801 (1)
P801 (2)
P801 (3)
P804 (1)
P804 (2)
P804 (3)
P802 (1)
P802 (2)
P802 (3)
P802 (4)
P802 (5)
P802 (6)
P802 (7)
P802 (8)
PJ802 (1)
PJ802 (2)
PJ802 (3)
PJ802 (4)
PJ802 (5)
Q803 EMITTER
Q801 BASE
Q801 Q803 COLLECTOR
Q03 BASE
Q801 EMITTER
Q615 COLLECTOR
Q615 BASE
Q615
EMITTER
PJ801 (3)
PJ801 (2)
PJ801 (1)
P612 (1)
P612 (2)
P612 (3)
TO U501
CIRCUIT LOGIC
PJ807 (1)
PJ807 (2)
PJ807 (3)
Q807 COLLECTOR
Q807 BAS
Q807 EMITTER
P001 (1)
P001 (2)
P001 (3)
TO U001 SELECTOR CIRCUIT
P606 (1)
P606 (2)
P606 (3)
P606 (4)
P606 (5)
P606 (6)
P606 (7)
P606 (8)
TO U501 LOGIC CIRCUIT

4-5 HEAD-AMP CIRCUIT BOARD


TP103
TP601
TP102
TP101
Q101
Q102
Q103
Q104
Q105
Q107
Q108
IC101
P101
P102
P103
R101
R103
R104
R105
R106
R107
R108
R109
R110
R111
R112
R113
R114
R115
R121
R122
R123
R124
R125
R126
R127
R128
R129
R130
R131
R151
R152
R153
C101
C102
C103
C104
C105
C106
C107
C108
C109
C110
C111
C112
C121
C122
C123
C124
C125
C126
C127
C128
C129
C130
C131
C132
C133
C134
C135
C136
L101
L102
L103
L104
L105
L106
L107
L108
L109
L110
L111
L112
L113
E

P102

1	D-REC 12V
2	GND
3	REC-C
4	GND
5	REC-Y

P101

1	V. HEAD (L)
2	V. HEAD (L)
3	GND
4	GND
5	V. HEAD (R)
6	V. HEAD (R)

P103

1	SW PULSE
2	E-REC 5V
3	PB-C
4	GND
5	GND
6	PB-Y

4-4 VIDEO/AUDIO/POWER CIRCUIT BOARD

P701

1	AUDIO HEAD
2	AUDIO HEAD
3	GND
4	AUDIO ERASE HD
5	GND

P804

1	+12V
2	GND
3	+32V

P208

1	DELAYED REC (L)
2	REC INH (L)
3	REC (H)
4	AUDIO MUTE

P207

1	SW PULSE
2	SYNC
3	GND
4	4.43 MHz

P202

1	D REC +12V
2	GND
3	REC-C
4	GND
5	REC-Y

P205

1	HD PULSE
2	AUDIO IN
3	GND
4	VIDEO IN

P702

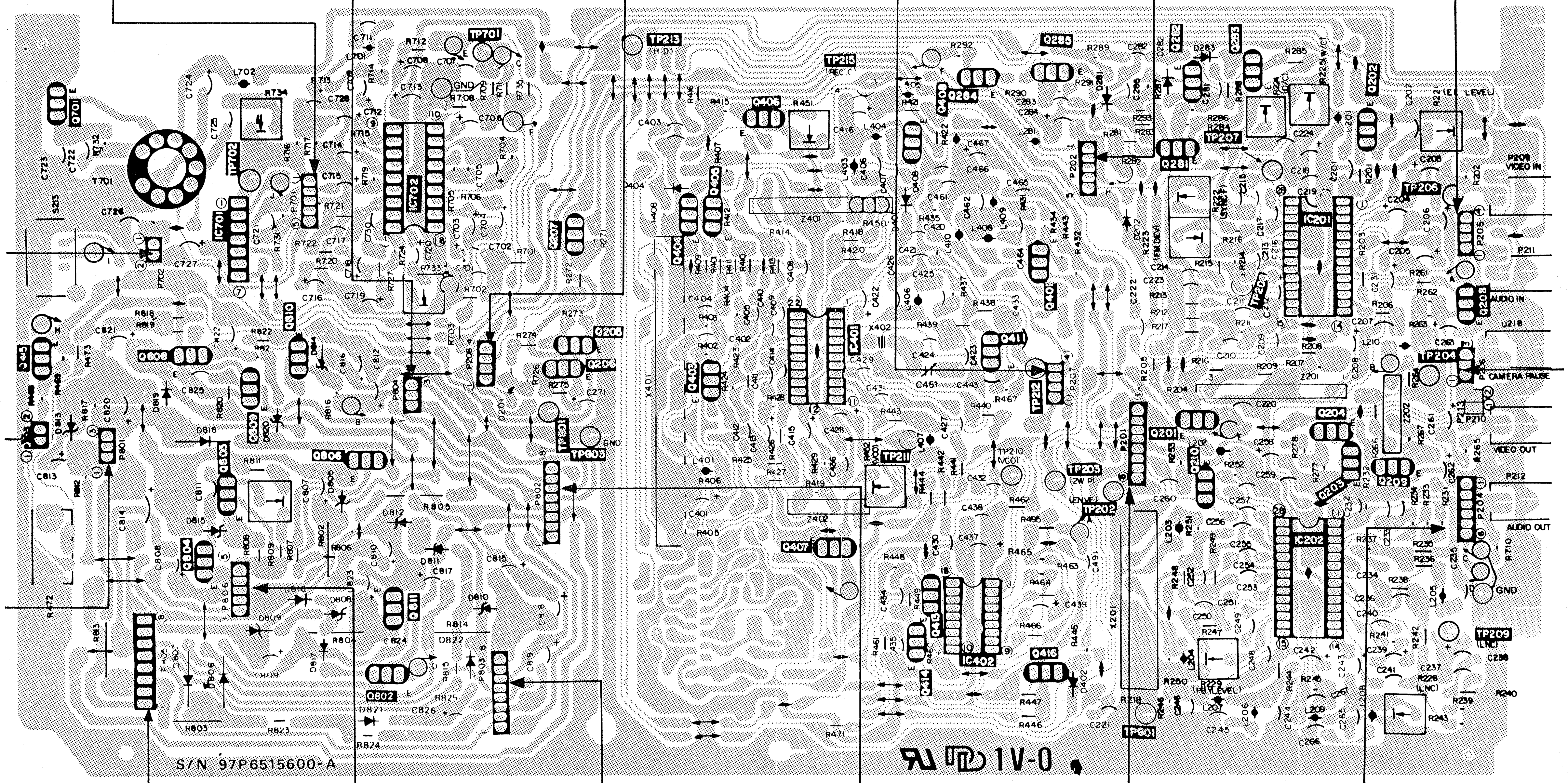
1	FE HEAD
2	GND

P203

1	TRACKING
2	STILL (H)

P801

1	Q807 B
2	Q807 C
3	Q807 E



TP701
TP213
TP215
Q286
Q701
T701
IC701
IC702
Q406
Q405
Q404
Q403
IC401
Q401
Q402
TP212
TP211
TP210 (VCO)
Q407
IC402
Q416
Q414
Q284
Q281
TP207
IC201
Q202
TP206
Q208
TP204
Q201
Q210
Q204
Q209
Q203
TP203
TP202
IC202
TP209 (LNC)
TP801
Q802
Q803
Q804
Q806
Q808
Q810
Q811
TP802
TP803
Q205
Q206
Q207
P206 VIDEO IN
AUDIO IN
CAMERA PAUSE
VIDEO OUT
AUDIO OUT
GND
S/N 97P6515600-A
1V-0

P206

1	*
2	CAMERA PAUSE (L)
3	E E (H)

P805

1	UNREG 20V
2	CENTER
3	AC 50V
4	AC 4V
5	CENTER
6	AC 4V
7	GND
8	GND

P806

1	Q801, Q803 C
2	Q801 B
3	Q801 E
4	Q803 B
5	Q803 E

P803

1	RESET 5V
2	AC 4V
3	GND
4	AC CLOCK
5	AC 4V
6	REG +5V
7	BACK UP 5V
8	−28V

P802

1	MOTOR 12V
2	GND
3	GND
4	REG +5V
5	+5V
6	+12V
7	POWER ON (L)
8	MOTOR GND

P201

1	SW PULSE
2	E REC 5V
3	PB-C
4	GND
5	GND
6	PB-Y
7	GND
8	ENVELOPE

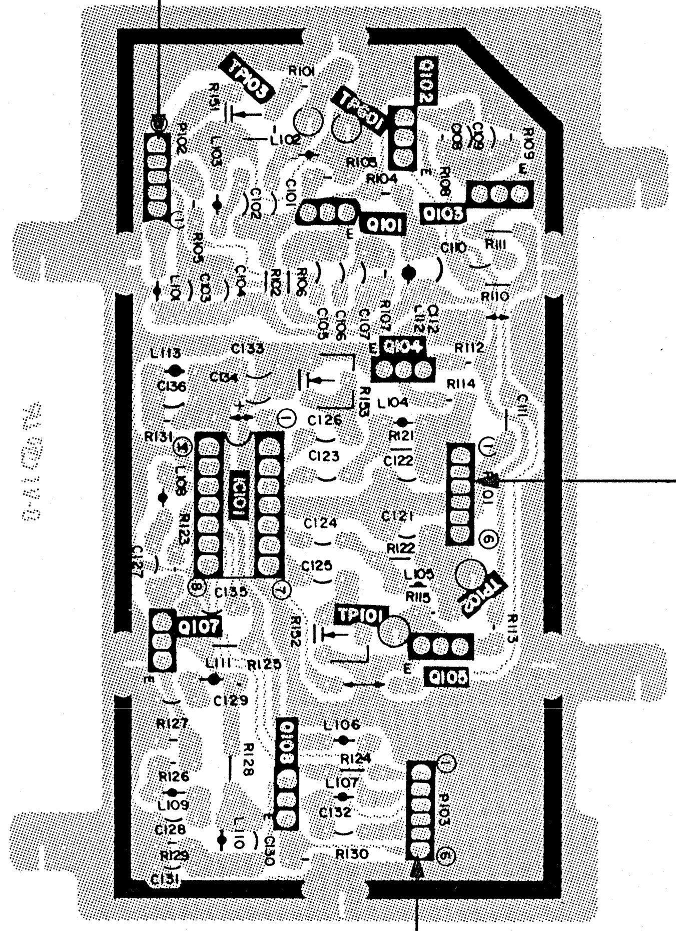
P204

1	MOD +12V
2	VIDEO OUT
3	GND
4	AUDIO OUT
5	GND
6	BOOSTER +12V

4-5 HEAD-AMP CIRCUIT BOARD

P102

1	D-REC 12V
2	GND
3	REC-C
4	GND
5	REC-Y


TP103
R101
Q102
R151
L102
R109
C109
C108
P102
L103
C101
C102
R105
R104
R106
Q101
Q103
C110
R111
R110
L101
C103
C104
R102
R106
C106
C105
R107
C107
C112
Q104
R112
L113
C133
C136
C134
R114
R153
L104
C111
C126
R121
R131
IC101
C123
C122
L108
R123
C124
C121
C127
R122
C125
L105
R115
C135
TP102
Q107
R152
TP101
R113
L111
R125
Q105
C129
R127
L106
R124
R128
Q108
L107
R126
L109
C132
C128
L110
C130
P103
R129
R130
C131

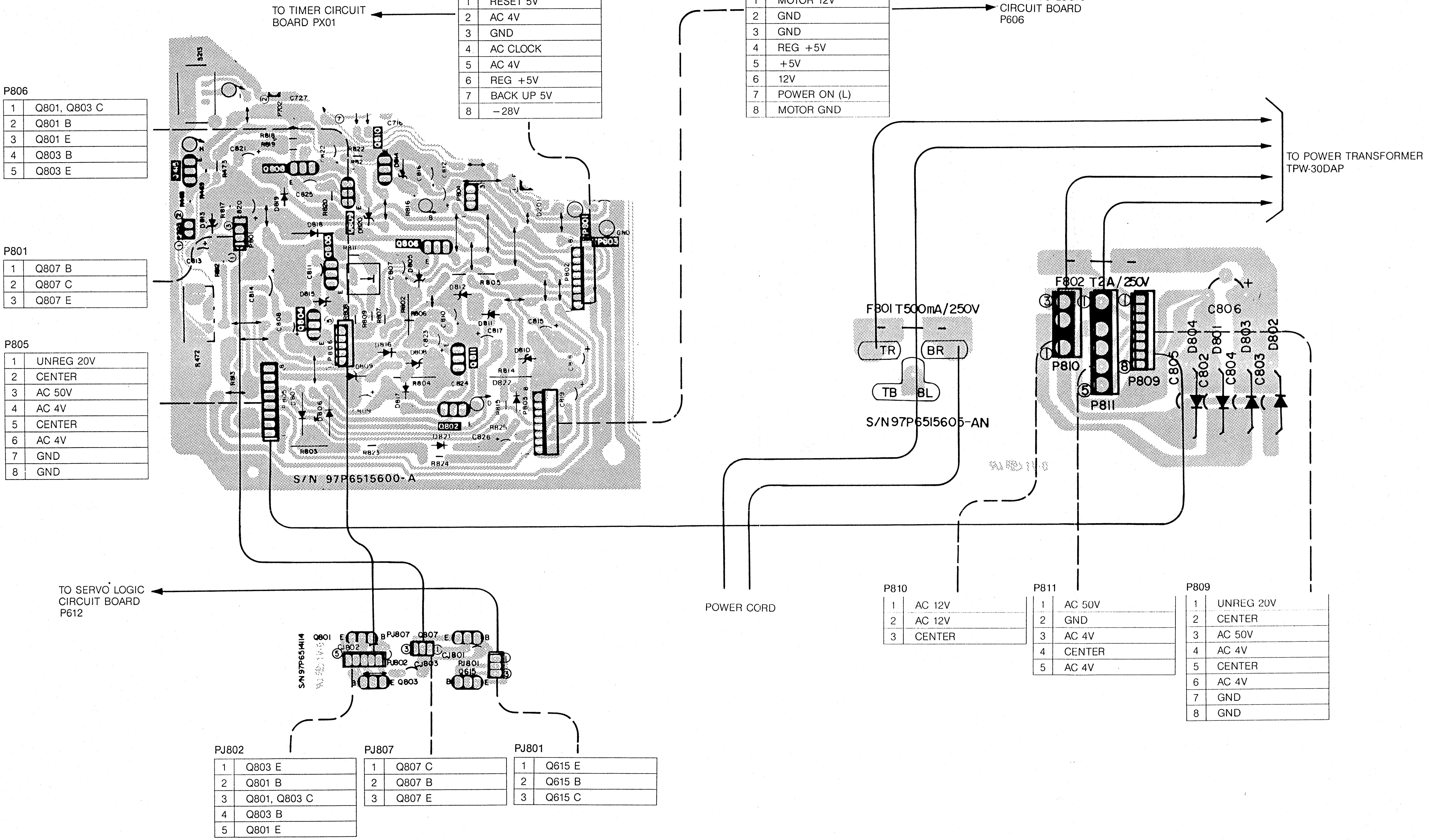
P101

1	V. HEAD (L)
2	V. HEAD (L)
3	GND
4	GND
5	V. HEAD (R)
6	V. HEAD (R)

P103

1	SW PULSE
2	E-REC 5V
3	PB-C
4	GND
5	GND
6	PB-Y

4-6 POWER SUPPLY SECTION IN VIDEO/AUDIO/POWER CIRCUIT BOARD
(30 DAP I)


TO TIMER CIRCUIT BOARD PX01
TO SERVO LOGIC CIRCUIT BOARD P606
TO POWER TRANSFORMER TPW-30DAP
TO SERVO LOGIC CIRCUIT BOARD P612
POWER CORD
F801 T500mA/250V
TR
BR
TB
BL
S/N97P6515605-AN
F802 T2A/250V
C806
D804
D801
D803
D802
C805
C802
C804
C803
P810
P811
P809
S/N 97P6515600-A
Q808
Q806
Q805
Q804
Q802
Q803
C727
C716
C821
C825
C813
C814
C811
C807
C808
C810
C815
C817
C819
C823
C824
C826
R818
R819
R822
R820
R811
R805
R806
R804
R803
R814
R815
R823
R824
R825
R472
D818
D819
D815
D816
D812
D811
D810
D809
D822
D821
P802
P803
P801
P805
P806
GND
S/N97P6514114
Q801
Q802
Q803
Q807
Q615
PJ807
PJ802
PJ801
CJ801
CJ803
E
B
C

P803

1	RESET 5V
2	AC 4V
3	GND
4	AC CLOCK
5	AC 4V
6	REG +5V
7	BACK UP 5V
8	−28V

P802

1	MOTOR 12V
2	GND
3	GND
4	REG +5V
5	+5V
6	12V
7	POWER ON (L)
8	MOTOR GND

P806

1	Q801, Q803 C
2	Q801 B
3	Q801 E
4	Q803 B
5	Q803 E

P801

1	Q807 B
2	Q807 C
3	Q807 E

P805

1	UNREG 20V
2	CENTER
3	AC 50V
4	AC 4V
5	CENTER
6	AC 4V
7	GND
8	GND

P810

1	AC 12V
2	AC 12V
3	CENTER

P811

1	AC 50V
2	GND
3	AC 4V
4	CENTER
5	AC 4V

P809

1	UNREG 20V
2	CENTER
3	AC 50V
4	AC 4V
5	CENTER
6	AC 4V
7	GND
8	GND

PJ802

1	Q803 E
2	Q801 B
3	Q801, Q803 C
4	Q803 B
5	Q801 E

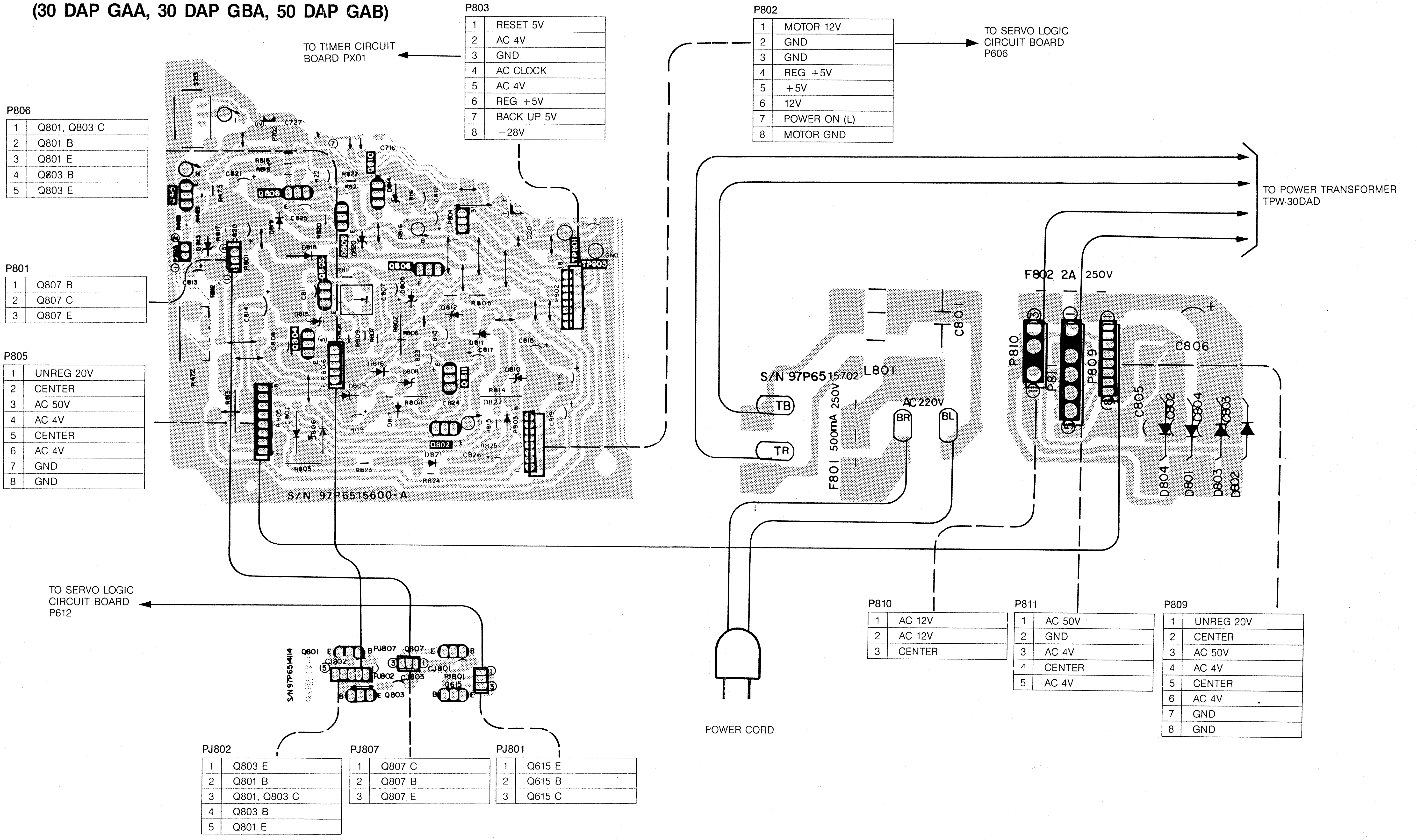
PJ807

1	Q807 C
2	Q807 B
3	Q807 E

PJ801

1	Q615 E
2	Q615 B
3	Q615 C

4-6 POWER SUPPLY SECTION IN VIDEO/AUDIO/POWER CIRCUIT BOARD (30 DAP GAA, 30 DAP GBA, 50 DAP GAB)


TO TIMER CIRCUIT BOARD PX01
TO SERVO LOGIC CIRCUIT BOARD P606
TO POWER TRANSFORMER TPW-30DAD
TO SERVO LOGIC CIRCUIT BOARD P612
F802 2A 250V
C801
L801
S/N 97P6515702
AC 220V
BR
BL
TB
TR
F801 500mA 250V
P810
P811
P809
C806
C805
D802
D804
D801
D803
S/N 97P6515600-A
Q802
Q804
Q806
Q808
TP801
TP803
GND
S/N 97P6514114
Q801
Q803
Q807
Q615
PJ807
PJ802
PJ801
CJ801
CJ802
CJ803
FOWER CORD

P803

1	RESET 5V
2	AC 4V
3	GND
4	AC CLOCK
5	AC 4V
6	REG +5V
7	BACK UP 5V
8	−28V

P802

1	MOTOR 12V
2	GND
3	GND
4	REG +5V
5	+5V
6	12V
7	POWER ON (L)
8	MOTOR GND

P806

1	Q801, Q803 C
2	Q801 B
3	Q801 E
4	Q803 B
5	Q803 E

P801

1	Q807 B
2	Q807 C
3	Q807 E

P805

1	UNREG 20V
2	CENTER
3	AC 50V
4	AC 4V
5	CENTER
6	AC 4V
7	GND
8	GND

P810

1	AC 12V
2	AC 12V
3	CENTER

P811

1	AC 50V
2	GND
3	AC 4V
4	CENTER
5	AC 4V

P809

1	UNREG 20V
2	CENTER
3	AC 50V
4	AC 4V
5	CENTER
6	AC 4V
7	GND
8	GND

PJ802

1	Q803 E
2	Q801 B
3	Q801, Q803 C
4	Q803 B
5	Q801 E

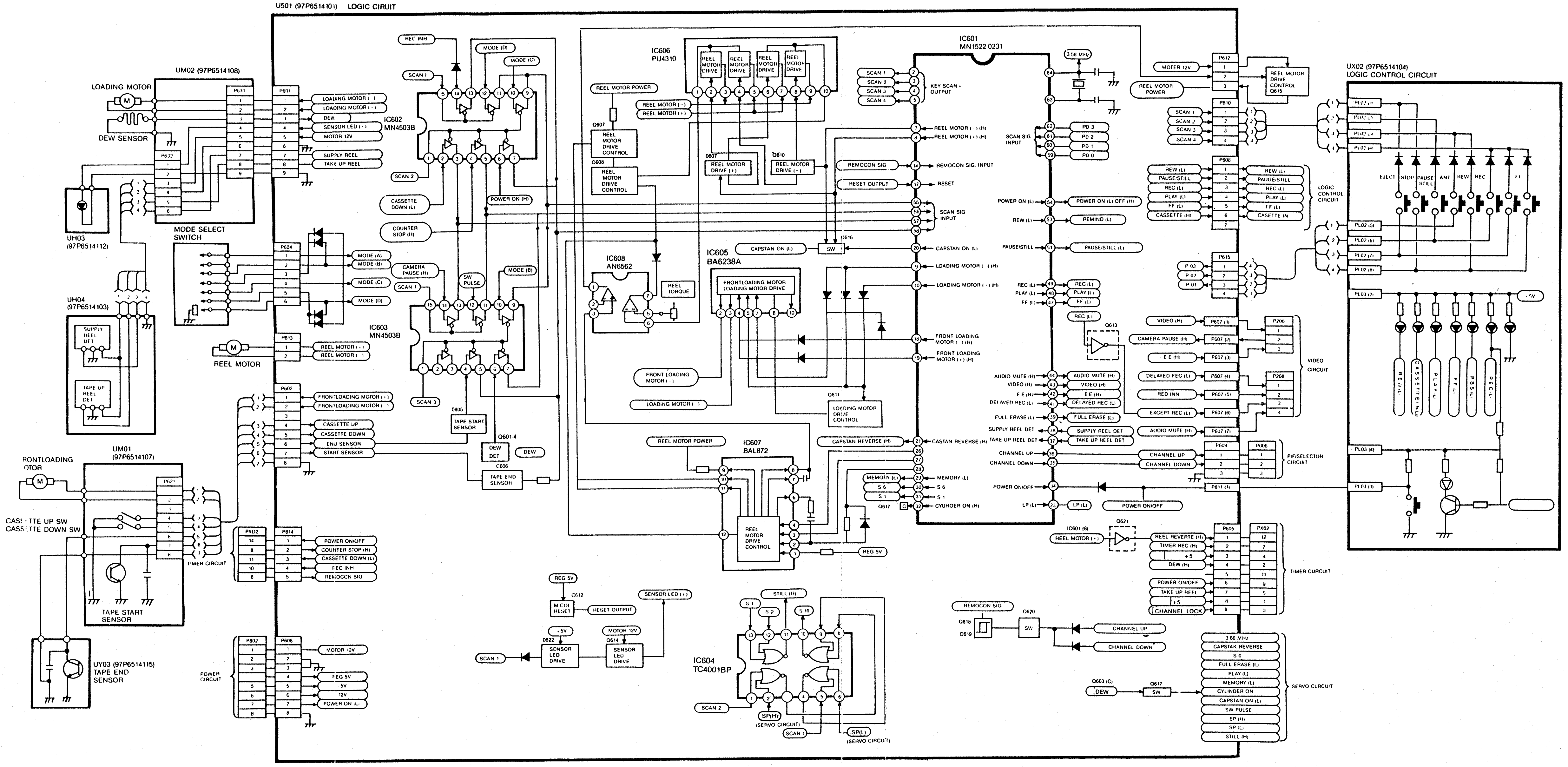
PJ807

1	Q807 C
2	Q807 B
3	Q807 E

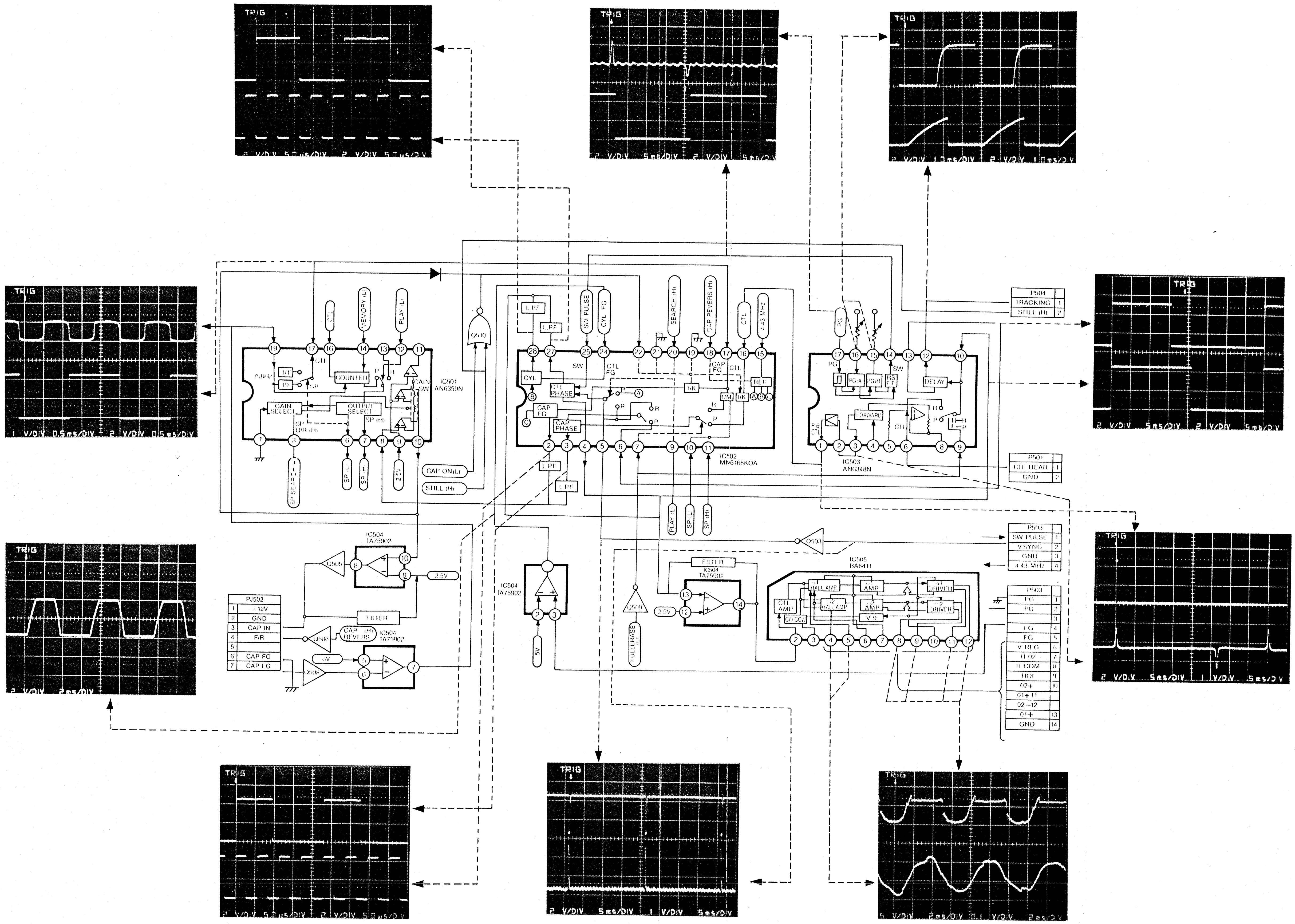
PJ801

1	Q615 E
2	Q615 B
3	Q615 C

4-7 SYSTEM CONTROL BLOCK DIAGRAM


U501 (97P6514101) LOGIC CIRUIT
UM02 (97P6514108)
LOADING MOTOR
DEW SENSOR
MODE SELECT SWITCH
UH03 (97P6514112)
UH04 (97P6514103)
SUPPLY REEL DET
TAPE UP REEL DET
REEL MOTOR
UM01 (97P6514107)
FRONTLOADING MOTOR
CASSETTE UP SW
CASSETTE DOWN SW
TAPE START SENSOR
TIMER CIRCUIT
UY03 (97P6514115) TAPE END SENSOR
POWER CIRCUIT
IC602 MN4503B
IC603 MN4503B
IC606 PU4310
IC608 AN6562
IC605 BA6238A
IC607 BAL872
IC604 TC4001BP
IC601 MN1522-0231
REEL MOTOR DRIVE
REEL MOTOR DRIVE CONTROL
REEL TORQUE
FRONTLOADING MOTOR LOADING MOTOR DRIVE
LOADING MOTOR DRIVE CONTROL
TAPE START SENSOR
DEW DET
TAPE END SENSOR
SENSOR LED DRIVE
M-COM RESET
SCAN SIG INPUT
KEY SCAN OUTPUT
REMOCON SIG INPUT
RESET
CAPSTAN ON (L)
CASTAN REVERSE (H)
MEMORY (L)
CYLINDER ON (H)
POWER ON/OFF
REEL MOTOR DRIVE CONTROL Q615
UX02 (97P6514104) LOGIC CONTROL CIRCUIT
EJECT
STOP
PAUSE STILL
REW
REC
FF
PLAY
CASSETTE
VIDEO CIRCUIT
PIF/SELECTOR CIRCUIT
TIMER CIRCUIT
SERVO CIRCUIT
CHANNEL UP
CHANNEL DOWN
SP(H) (SERVO CIRCUIT)
SP(L) (SERVO CIRCUIT)

4-8 SERVO BLOCK DIAGRAM


TRIG
2 V/DIV 5.0µs/DIV 2 V/DIV 5.0µs/DIV
2 V/DIV 5ms/DIV 2 V/DIV 5ms/DIV
2 V/DIV 1.0ms/DIV 2 V/DIV 1.0ms/DIV
1 V/DIV 0.5ms/DIV 2 V/DIV 0.5ms/DIV
2 V/DIV 5ms/DIV 2 V/DIV 5ms/DIV
2 V/DIV 2ms/DIV
2 V/DIV 5ms/DIV 1 V/DIV 5ms/DIV
2 V/DIV 5.0µs/DIV 2 V/DIV 5.0µs/DIV
2 V/DIV 5ms/DIV 1 V/DIV 5ms/DIV
5 V/DIV 2ms/DIV 0.1 V/DIV 2ms/DIV
IC501
AN6359N
CTL
MEMORY (L)
PLAY (L)
758Hz
1/1
1/2
SP
CTL
COUNTER
P
R
GAIN SW
GAIN SELECT
OUTPUT SELECT
SP Q/R (H)
SP (H)
SP SEARCH
SP (L)
SP (H)
2.5V
Q510
CAP ON(L)
STILL (H)
IC502
MN6168KOA
LPF
SW PULSE
CYL FG
SEARCH (H)
CAP PEVERS (H)
CTL
4.43 MHz
CYL
SW
CTL FG
CTL PHASE
CAP FG
CAP PHASE
1/K
1/M
REF
CTL
P
R
PLAY (L)
SP (L)
SP (H)
IC503
AN6348N
PG
SW
PG(A)
PG(H)
RS FF
DELAY
FORWARD
PB CTL
CTL
P504
TRACKING 1
STILL (H) 2
P501
CTL HEAD 1
GND 2
P503
SW PULSE 1
V.SYNC 2
GND 3
4.43 MHz 4
Q503
IC504
TA75902
Q505
2.5V
FILTER
PJ502
1 +12V
2 GND
3 CAP IN
4 F/R
5
6 CAP FG
7 CAP FG
Q506
CAP (H) REVERS
Q508
6V
5V
Q509
FULLERASE (L)
IC505
BA6411
φ1 HALL AMP
φ2 HALL AMP
φ1 AMP
φ2 AMP
φ1 DRIVER
φ2 DRIVER
CTL AMP
CW/CCW
V 9
P503
PG 1
PG 2
3
FG 4
FG 5
V.REG 6
H 02 7
H COM 8
HOI 9
02+ 10
01+ 11
02− 12
01+ 13
GND 14

4-9 SERVO-LOGIC CIRCUIT BOARD

P610

1	SCAN 1
2	SCAN 2
3	SCAN 3
4	SCAN 4

P604

1	MODE SW I
2	MODE SW III
3	MODE SW IV
4	MODE SW V
5	MODE SW VI
6	MODE SW VII

P614

1	POWER ON (H)
2	COUNTER STOP (H)
3	CST DOWN (L)
4	REC INH
5	REMOCON SIG

P602

1	F/L (+)
2	F/L (−)
3	*
4	CST UP
5	CST. DOWN
6	TAPE END
7	TAPE START
8	GND

P608

1	REW (L)
2	PAUSE/STILL (L)
3	REC (L)
4	PLAY (L)
5	FF (L)
6	CASSETTE IN
7	*

P607

1	*
2	CAMERA PAUSE (H)
3	E.E (H)
4	DELAYED REC (L)
5	REC INH
6	EXCEPT REC (L)
7	AUDIO MUTE (H)

P603

1	REC INH
2	GND

P504

1	TRACKING
2	STILL (H)

P611

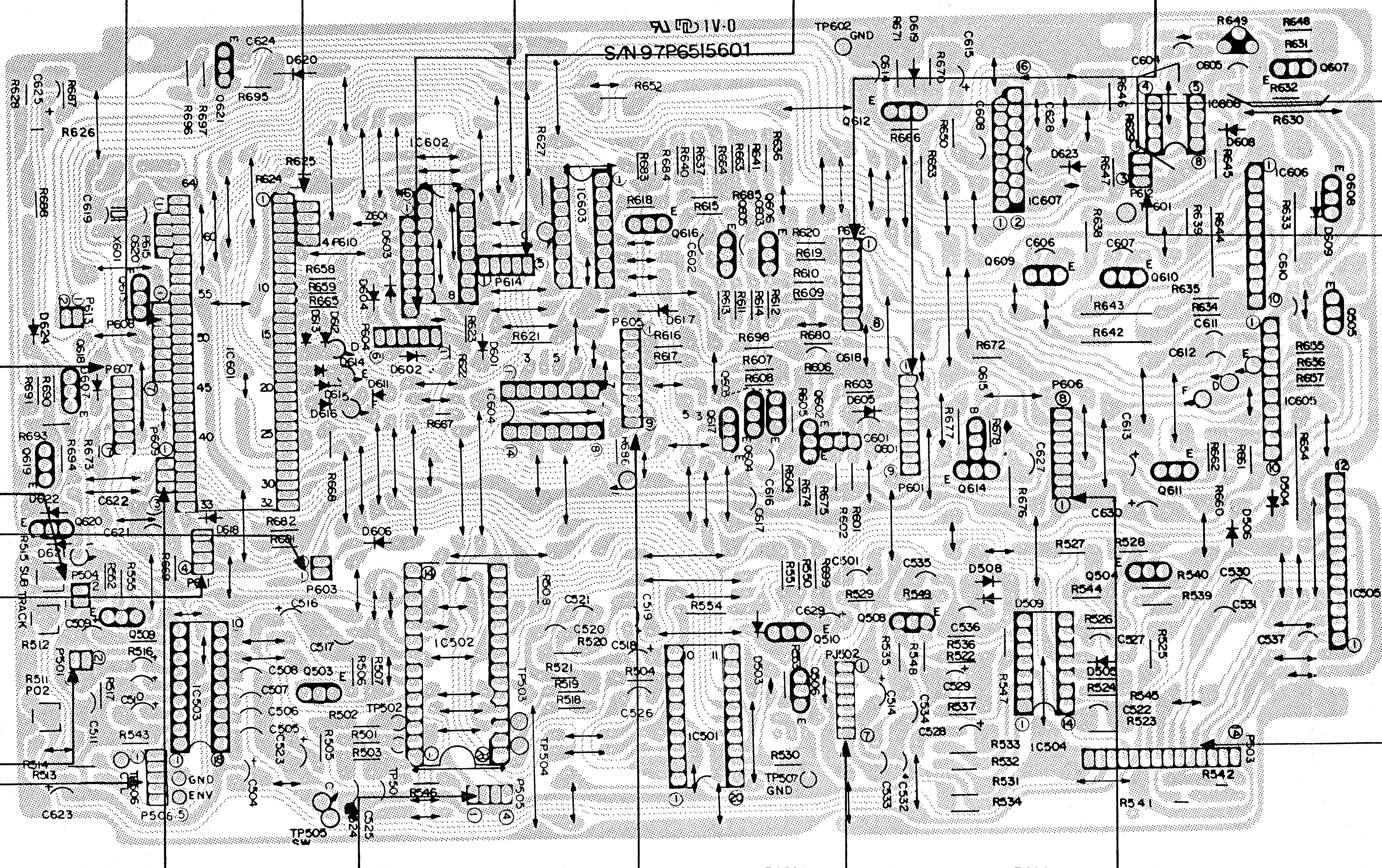
1	POWER ON/OFF
2	+5V
3	GND
4	REG 5V

P501

1	CTL HEAD
2	GND

P506

1	CTL
2	SW PLUSE
3	VIDEO GND
4	ENV
5	*


S/N 97P6515601
IC501
IC502
IC503
IC504
IC505
IC601
IC602
IC603
IC604
IC605
IC606
IC607
IC608
X601
TP502
TP503
TP504
TP505
TP507 GND
TP602 GND

P601

1	L.M (−)
2	L.M (+)
3	DEW SENSOR
4	SENSOR LED
5	MOTOR 12V
6	GND
7	S REEL DET
8	T REEL DET
9	MOTOR GND

P612

1	Q615 C
2	Q615 B
3	Q615 E

P601

1	P 03
2	P 02
3	P 01
4	*

P503

1	PG
2	PG
3	*
4	CYLINDER FG
5	CYLINDER FG
6	V REG
7	H 02
8	H COM
9	H 01
10	02 +
11	01 +
12	02 −
13	01 −
14	GND

P609

1	CH UP
2	CH DOWN
3	GND

P505

1	SW PULSE
2	V-SYNC
3	GND
4	4.43 MHz

P605

1	REEL REVERSE
2	TIMER REC (H)
3	+5V
4	DEW (L)
5	GND
6	POWER ON/OFF
7	REEL PULSE
8	+5V
9	CH LOCK

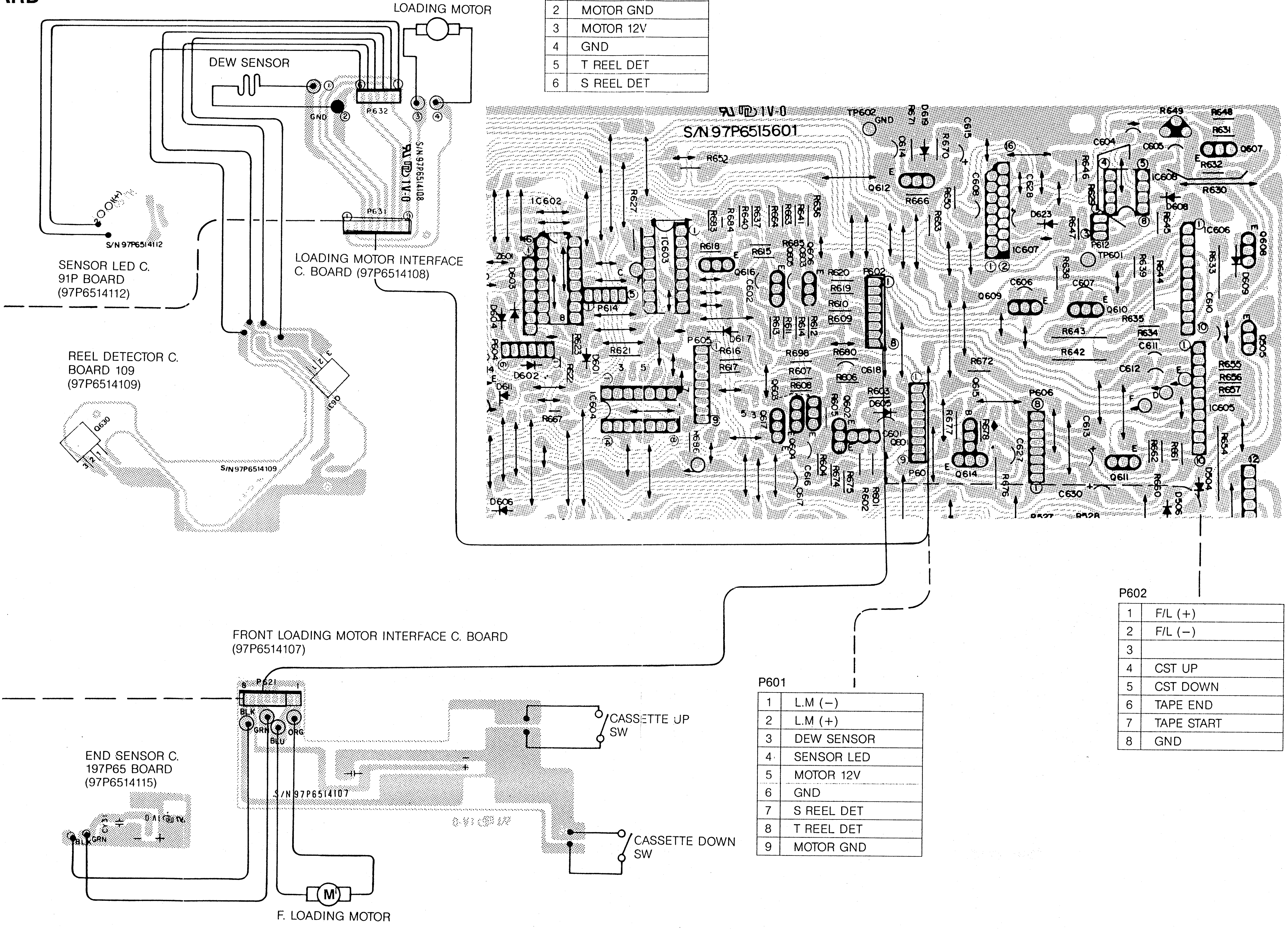
PJ502

1	+12V
2	M-GND
3	CAPSTAN IN
4	F/R
5	*
6	CAPSTAN FG
7	CAPSTAN FG

P606

1	MOTOR 12V
2	GND
3	GND
4	REG 5V
5	+5V
6	+12V
7	POWER ON (L)
8	MOTOR GND

4-10 SYSTEM CONTROL SECTION IN SERVO/LOGIC CIRCUIT BOARD


LOADING MOTOR
DEW SENSOR
GND
P632
P631
S/N 97P6514108
S/N 97P6514112
SENSOR LED C. 91P BOARD (97P6514112)
LOADING MOTOR INTERFACE C. BOARD (97P6514108)
REEL DETECTOR C. BOARD 109 (97P6514109)
S/N 97P6514109
Q630
S/N 97P6515601
TP602
GND
TP601
IC602
IC603
IC604
IC605
IC606
IC607
IC608
P601
P602
P605
P612
P614
FRONT LOADING MOTOR INTERFACE C. BOARD (97P6514107)
P621
BLK
GRN
BLU
ORG
S/N 97P6514107
END SENSOR C. 197P65 BOARD (97P6514115)
CASSETTE UP SW
CASSETTE DOWN SW
M
F. LOADING MOTOR

P632

1	SENSOR LED
2	MOTOR GND
3	MOTOR 12V
4	GND
5	T REEL DET
6	S REEL DET

P631

1	L.M (−)
2	L.M (+)
3	DEW SENSOR
4	SENSOR LED
5	MOTOR 12V
6	GND
7	S REEL DET
8	T REEL DET
9	MOTOR GND

P621

1	F/L (+)
2	F/L (−)
3	
4	CST UP
5	CST DOWN
6	TAPE END
7	TAPE START
8	GND

P601

1	L.M (−)
2	L.M (+)
3	DEW SENSOR
4	SENSOR LED
5	MOTOR 12V
6	GND
7	S REEL DET
8	T REEL DET
9	MOTOR GND

P602

1	F/L (+)
2	F/L (−)
3	
4	CST UP
5	CST DOWN
6	TAPE END
7	TAPE START
8	GND

4-11 LOGIC-CONTROL CIRCUIT BOARD

PL01

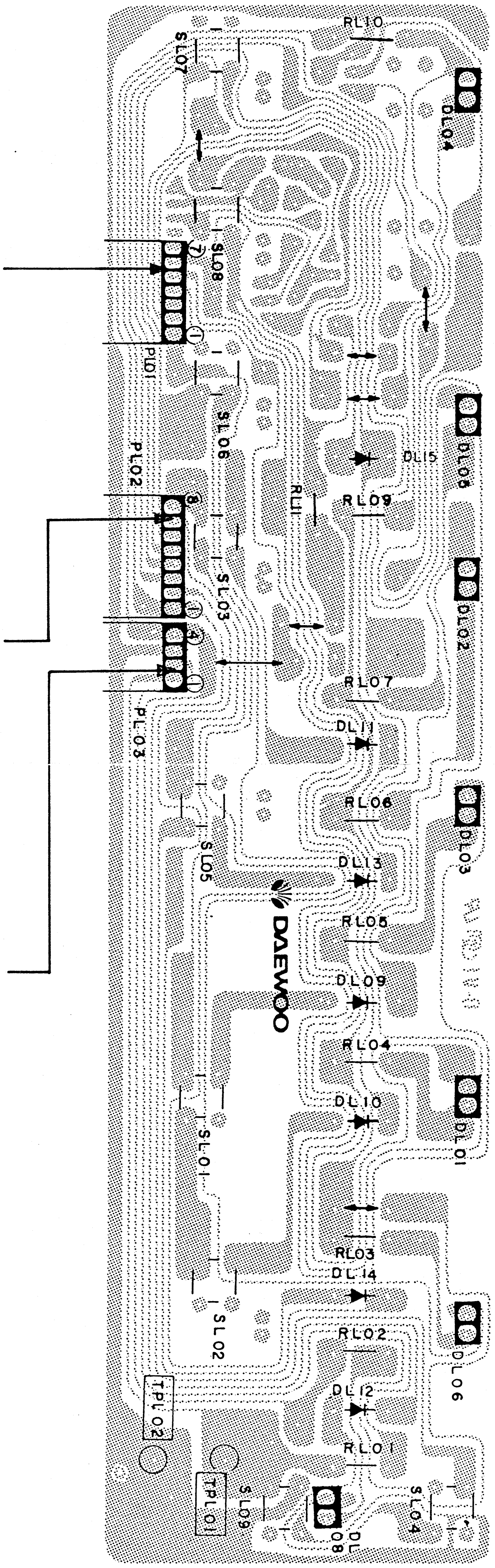
1	REW (L)
2	PAUSE (L)
3	REC (L)
4	PLAY (L)
5	FF (L)
6	CASSETTE IN
7	OTR

PL02

1	SCAN 1
2	SCAN 2
3	SCAN 3
4	SCAN 4
5	OTR
6	P 01
7	P 02
8	P 03

PL03

1	POWER ON/OFF
2	+5V
3	GND
4	REG 5V


RL10
SL07
DL04
SL08
⑦
①
PL01
SL06
PL02
⑧
①
④
①
SL03
RL11
DL15
DL05
RL09
DL02
RL07
PL03
DL11
RL06
DL03
SL05
DL13
DAEWOO
RL05
DL09
RL04
DL10
DL01
SL01
RL03
DL14
SL02
RL02
DL06
TPL02
DL12
RL01
TPL01
SL09
DL08
SL04

4-11 LOGIC-CONTROL CIRCUIT BOARD

PL01

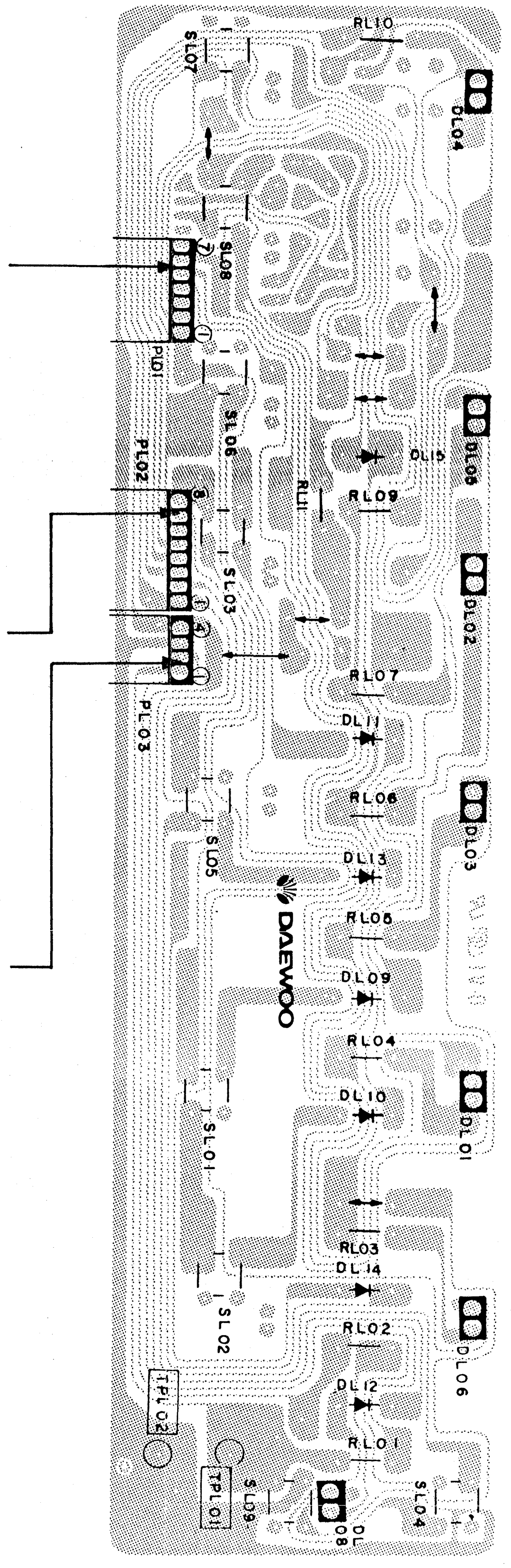
1	REW (L)
2	PAUSE (L)
3	REC (L)
4	PLAY (L)
5	FF (L)
6	CASSETTE IN
7	OTR

PL02

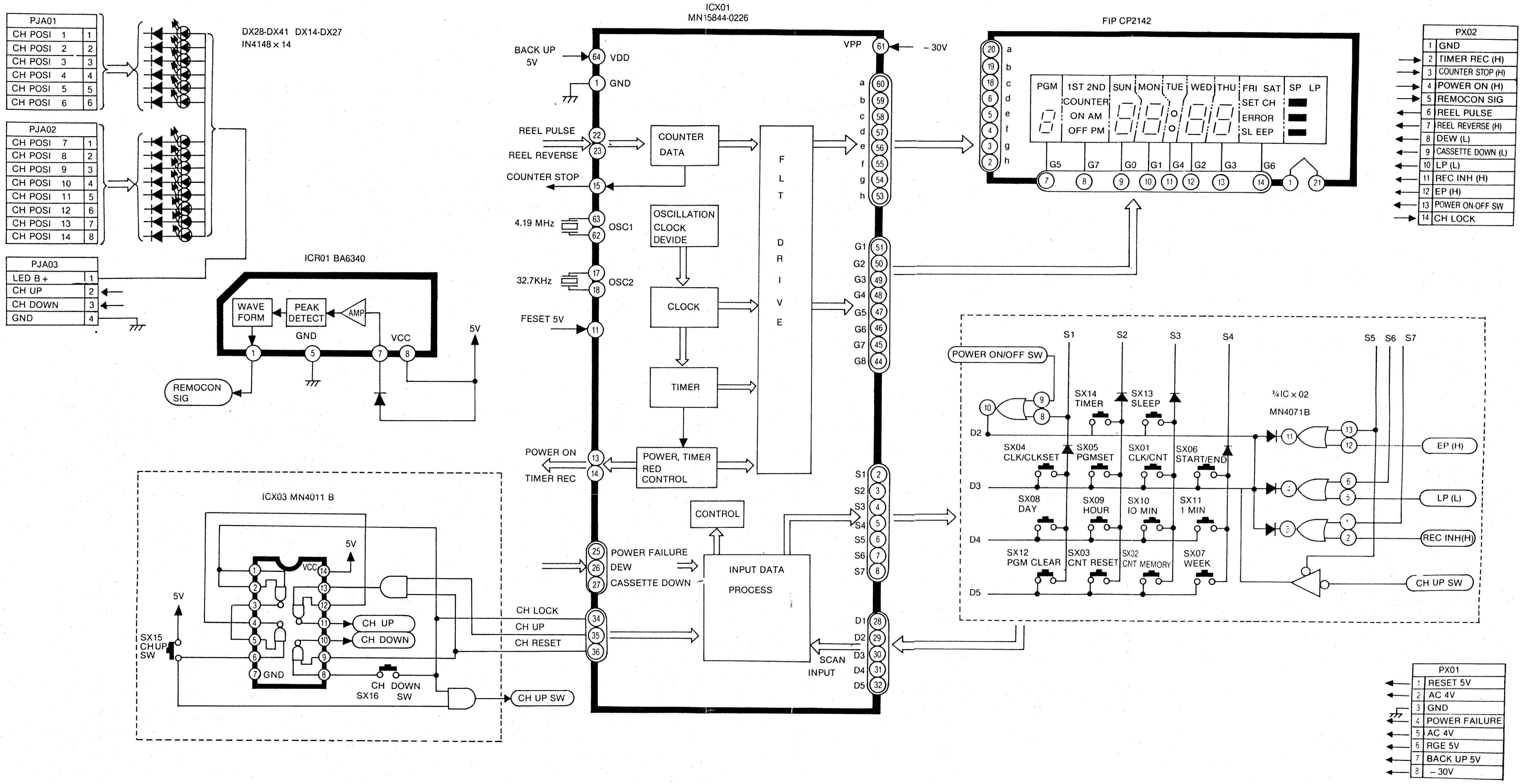
1	SCAN 1
2	SCAN 2
3	SCAN 3
4	SCAN 4
5	OTR
6	P 01
7	P 02
8	P 03

PL03

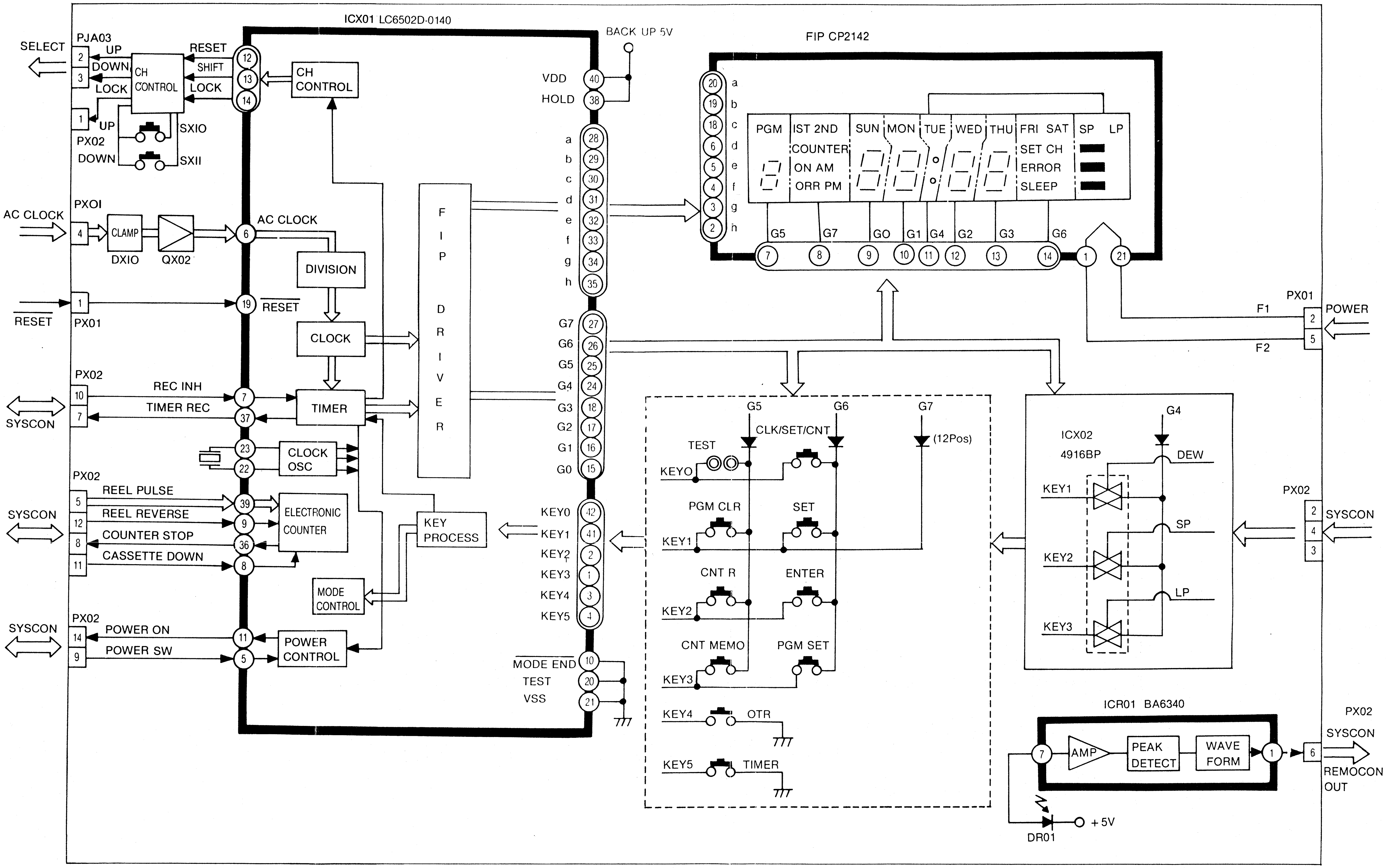
1	POWER ON/OFF
2	+5V
3	GND
4	REG 5V


RL10
SL07
DL04
SL08
PL01
SL06
PL02
RL11
DL15
DL05
RL09
SL03
DL02
PL03
RL07
DL11
RL06
DL03
SL05
DL13
DAEWOO
RL05
DL09
RL04
DL10
DL01
SL01
RL03
DL14
SL02
RL02
DL06
DL12
TPL02
RL01
TPL01
SL09
DL08
SL04

4-12 TIMER BLOCK DIAGRAM (30 DAP I, 30 DAP GBA, 50 DAP GAB)


PJA01
CH POSI 1
CH POSI 2
CH POSI 3
CH POSI 4
CH POSI 5
CH POSI 6
PJA02
CH POSI 7
CH POSI 8
CH POSI 9
CH POSI 10
CH POSI 11
CH POSI 12
CH POSI 13
CH POSI 14
DX28-DX41 DX14-DX27
IN4148 x 14
PJA03
LED B+
CH UP
CH DOWN
GND
ICR01 BA6340
WAVE FORM
PEAK DETECT
AMP
GND
VCC
5V
REMOCON SIG
ICX03 MN4011 B
5V
VCC
GND
CH UP
CH DOWN
SX15 CHUP SW
CH DOWN SW
SX16
CH UP SW
ICX01
MN15844-0226
BACK UP 5V
VDD
GND
VPP
-30V
REEL PULSE
REEL REVERSE
COUNTER STOP
COUNTER DATA
4.19 MHz
OSC1
32.7KHz
OSC2
OSCILLATION CLOCK DEVIDE
CLOCK
FESET 5V
TIMER
POWER ON
TIMER REC
POWER, TIMER RED CONTROL
CONTROL
POWER FAILURE
DEW
CASSETTE DOWN
INPUT DATA PROCESS
CH LOCK
CH UP
CH RESET
SCAN INPUT
F L T D R I V E
a b c d e f g h
G1 G2 G3 G4 G5 G6 G7 G8
S1 S2 S3 S4 S5 S6 S7
D1 D2 D3 D4 D5
FIP CP2142
PGM
1ST 2ND
COUNTER
ON AM
OFF PM
SUN MON TUE WED THU FRI SAT
SET CH
ERROR
SL EEP
SP LP
G5 G7 G0 G1 G4 G2 G3 G6
PX02
1 GND
2 TIMER REC (H)
3 COUNTER STOP (H)
4 POWER ON (H)
5 REMOCON SIG
6 REEL PULSE
7 REEL REVERSE (H)
8 DEW (L)
9 CASSETTE DOWN (L)
10 LP (L)
11 REC INH (H)
12 EP (H)
13 POWER ON-OFF SW
14 CH LOCK
POWER ON/OFF SW
S1 S2 S3 S4 S5 S6 S7
SX14 TIMER
SX13 SLEEP
¾IC x 02
MN4071B
SX04 CLK/CLKSET
SX05 PGMSET
SX01 CLK/CNT
SX06 START/END
SX08 DAY
SX09 HOUR
SX10 IO MIN
SX11 1 MIN
SX12 PGM CLEAR
SX03 CNT RESET
SX02 CNT MEMORY
SX07 WEEK
EP (H)
LP (L)
REC INH(H)
CH UP SW
PX01
1 RESET 5V
2 AC 4V
3 GND
4 POWER FAILURE
5 AC 4V
6 RGE 5V
7 BACK UP 5V
8 -30V

TIMER BLOCK DIAGRAM (30 DAP GAA)

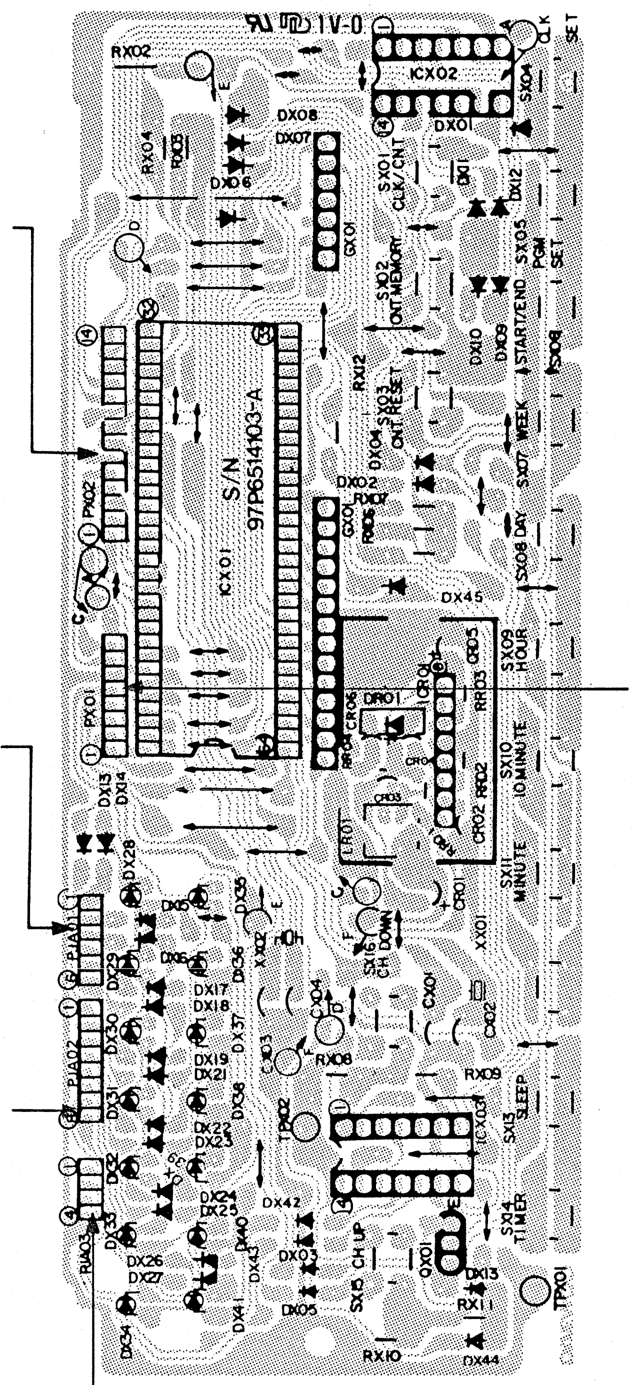


ICX01 LC6502D-0140
BACK UP 5V
FIP CP2142
SELECT
PJA03
UP
DOWN
LOCK
CH CONTROL
RESET
SHIFT
LOCK
CH CONTROL
SXIO
SXII
PX02
UP
DOWN
VDD
HOLD
PGM
IST 2ND
COUNTER
ON AM
ORR PM
SUN
MON
TUE
WED
THU
FRI
SAT
SP
LP
SET CH
ERROR
SLEEP
AC CLOCK
PXOI
CLAMP
DXIO
QX02
AC CLOCK
DIVISION
FIP DRIVER
RESET
PX01
RESET
CLOCK
PX02
REC INH
TIMER REC
SYSCON
TIMER
CLOCK OSC
PX02
REEL PULSE
REEL REVERSE
COUNTER STOP
CASSETTE DOWN
SYSCON
ELECTRONIC COUNTER
KEY PROCESS
MODE CONTROL
SYSCON
PX02
POWER ON
POWER SW
POWER CONTROL
a b c d e f g h
G7 G6 G5 G4 G3 G2 G1 G0
KEY0 KEY1 KEY2 KEY3 KEY4 KEY5
MODE END
TEST
VSS
G5 G7 GO G1 G4 G2 G3 G6
F1
F2
PX01
POWER
G5
G6
G7
CLK/SET/CNT
(12Pos)
TEST
KEYO
PGM CLR
SET
KEY1
CNT R
ENTER
KEY2
CNT MEMO
PGM SET
KEY3
KEY4
OTR
KEY5
TIMER
ICX02
4916BP
G4
DEW
SP
LP
KEY1
KEY2
KEY3
PX02
SYSCON
ICR01 BA6340
AMP
PEAK DETECT
WAVE FORM
DR01
+5V
PX02
SYSCON
REMOCON OUT

TIMER CIRCUIT BOARD (30 DAP I, 30 DAP GBA, 30 DAP GAB)

PX02

1	GND
2	TIMER REC (H)
3	COUNTER STOP (H)
4	POWER ON (H)
5	REMOCON SIG
6	REEL PULSE
7	REEL REVERSE (H)
8	DEW (L)
9	CST DOWN (L)
10	+5V
11	REC INH (H)
12	+5V
13	POWER ON/OFF
14	CH LOCK


RX02
ICX02
DX08
DX07
DX06
DX01
RX04
GX01
SX01 CLK/CNT
SX02 CNT MEMORY
SX03 CNT RESET
SX04
SX05 PGM SET
CLK SET
DX10
DX09
START/END
SX06
SX07 WEEK
SX08 DAY
SX09 HOUR
SX10 10 MINUTE
SX11 MINUTE
SX13 SLEEP
SX14 TIMER
SX15 CH UP
SX16 CH DOWN
S/N 97P6514103-A
ICX01
PX02
PX01
RX12
DX02
DX45
IC01
CR02
RR02
XX01
CX01
CX02
ICX03
TPX02
TPX01
QX01
DX13
RX10
DX44
PJA01
PJA02
PJA03
DX05
DX03

PX01

1	−30V
2	BACK UP 5V
3	REG 5V
4	AC 5V
5	AC CLOCK
6	GND
7	AC 5V
8	RESET 5V

PJA01

1	CH POSI 1
2	CH POSI 2
3	CH POSI 3
4	CH POSI 4
5	CH POSI 5
6	CH POSI 6

PJA02

1	CH POSI 7
2	CH POSI 8
3	CH POSI 9
4	CH POSI 10
5	CH POSI 11
6	CH POSI 12
7	CH POSI 13
8	CH POSI 14

PJA]3

1	LED B+
2	CH UP
3	CH DOWN
4	GND

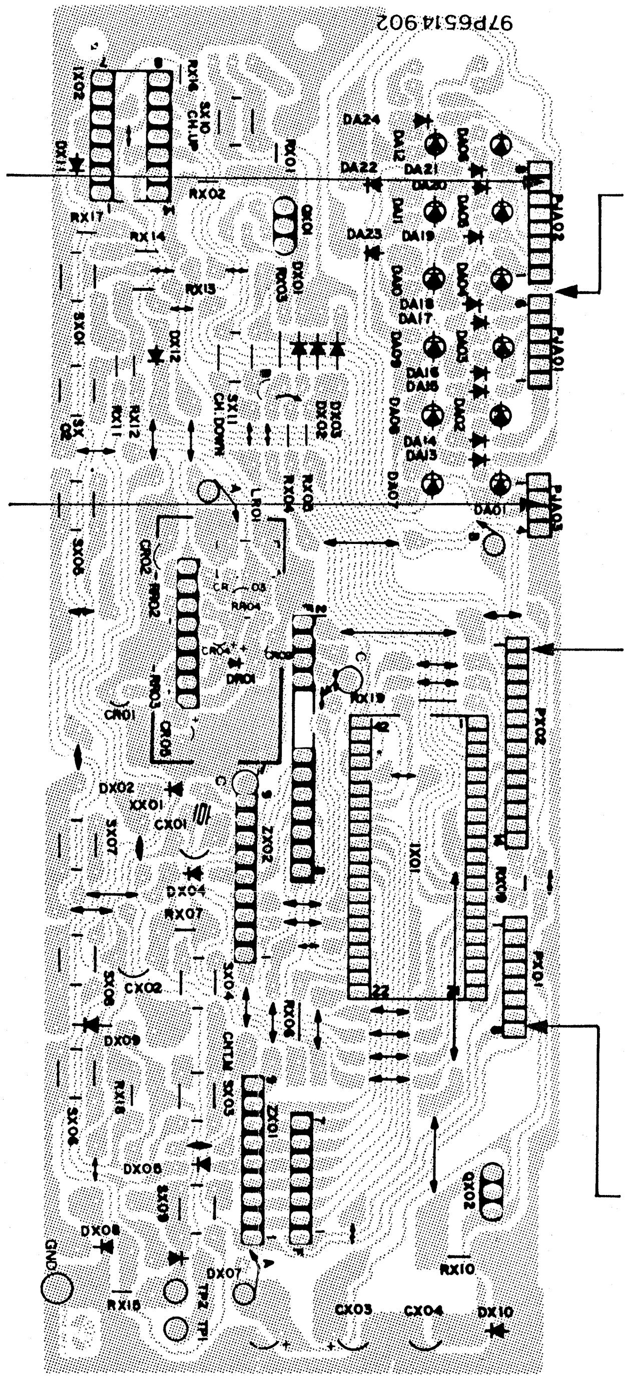
4-13 TIMER CIRCUIT BOARD (30 DAP GAA)

PJA02

1	CH POSI 7
2	CH POSI 8
3	CH POSI 9
4	CH POSI 10
5	CH POSI 11
6	CH POSI 12

PJA03

1	LED B+
2	CH UP
3	CH DOWN
4	GND


97P6514902
PJA02
PJA01
PJA03
PX02
PX01
IC01
CX01
CX02
CX03
CX04
DX02
DX04
DX06
DX07
DX08
DX09
DX10
RX10
RX17
RX14
GND
TP1
TP2

PJA01

1	CH POSI 1
2	CH POSI 2
3	CH POSI 3
4	CH POSI 4
5	CH POSI 5
6	CH POSI 6

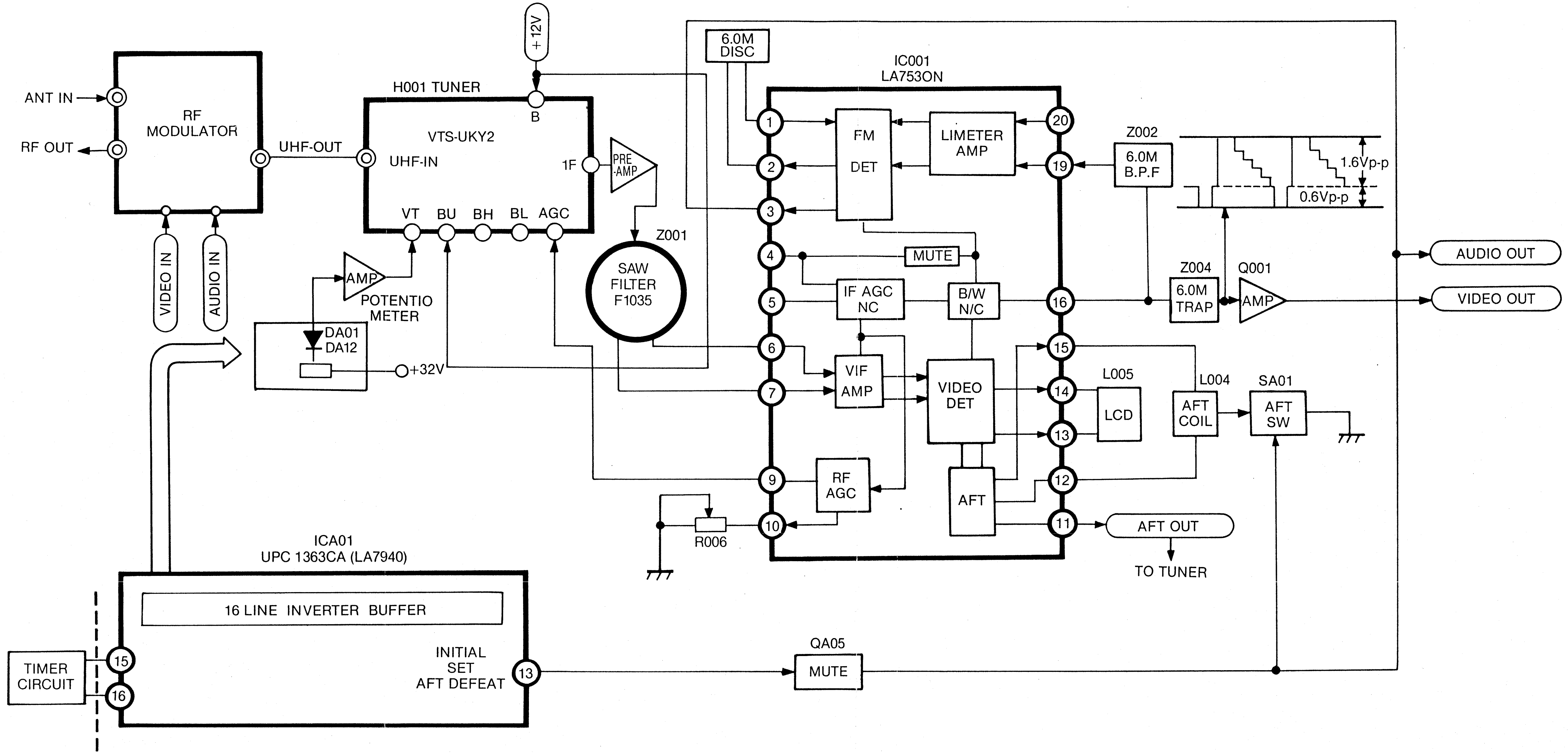
PX02

1	CH LOCK
2	DEW (H)
3	LP (L)
4	SP (L)
5	REEL PULSE
6	REMOCON SIG
7	TIMER REC (H)
8	COUNTER STOP (H)
9	POWER ON/OFF
10	REC INH
11	CST DOWN (L)
12	REEL REVERSE
13	GND
14	POWER ON (H)

PX01

1	RESET
2	AC (F)
3	GND
4	AC CLOCK
5	AC (F)
6	IC 5V
7	BACK UP
8	−28V

4-14 PIF SELECTOR BLOCK DIAGRAM (30 DAP I)


ANT IN
RF OUT
RF MODULATOR
UHF-OUT
VIDEO IN
AUDIO IN
H001 TUNER
VTS-UKY2
UHF-IN
+12V
B
1F
PRE -AMP
VT
BU
BH
BL
AGC
AMP
POTENTIO METER
DA01
DA12
+32V
Z001
SAW FILTER F1035
6.0M DISC
IC001
LA7530N
FM DET
LIMETER AMP
MUTE
IF AGC NC
B/W N/C
VIF AMP
VIDEO DET
RF AGC
AFT
R006
1
2
3
4
5
6
7
9
10
11
12
13
14
15
16
19
20
Z002
6.0M B.P.F
1.6Vp-p
0.6Vp-p
Z004
6.0M TRAP
Q001
AMP
AUDIO OUT
VIDEO OUT
L005
LCD
L004
AFT COIL
SA01
AFT SW
AFT OUT
TO TUNER
ICA01
UPC 1363CA (LA7940)
16 LINE INVERTER BUFFER
TIMER CIRCUIT
15
16
INITIAL SET AFT DEFEAT
13
QA05
MUTE

4-15 PIF SELECTOR CIRCUIT BOARD

P002

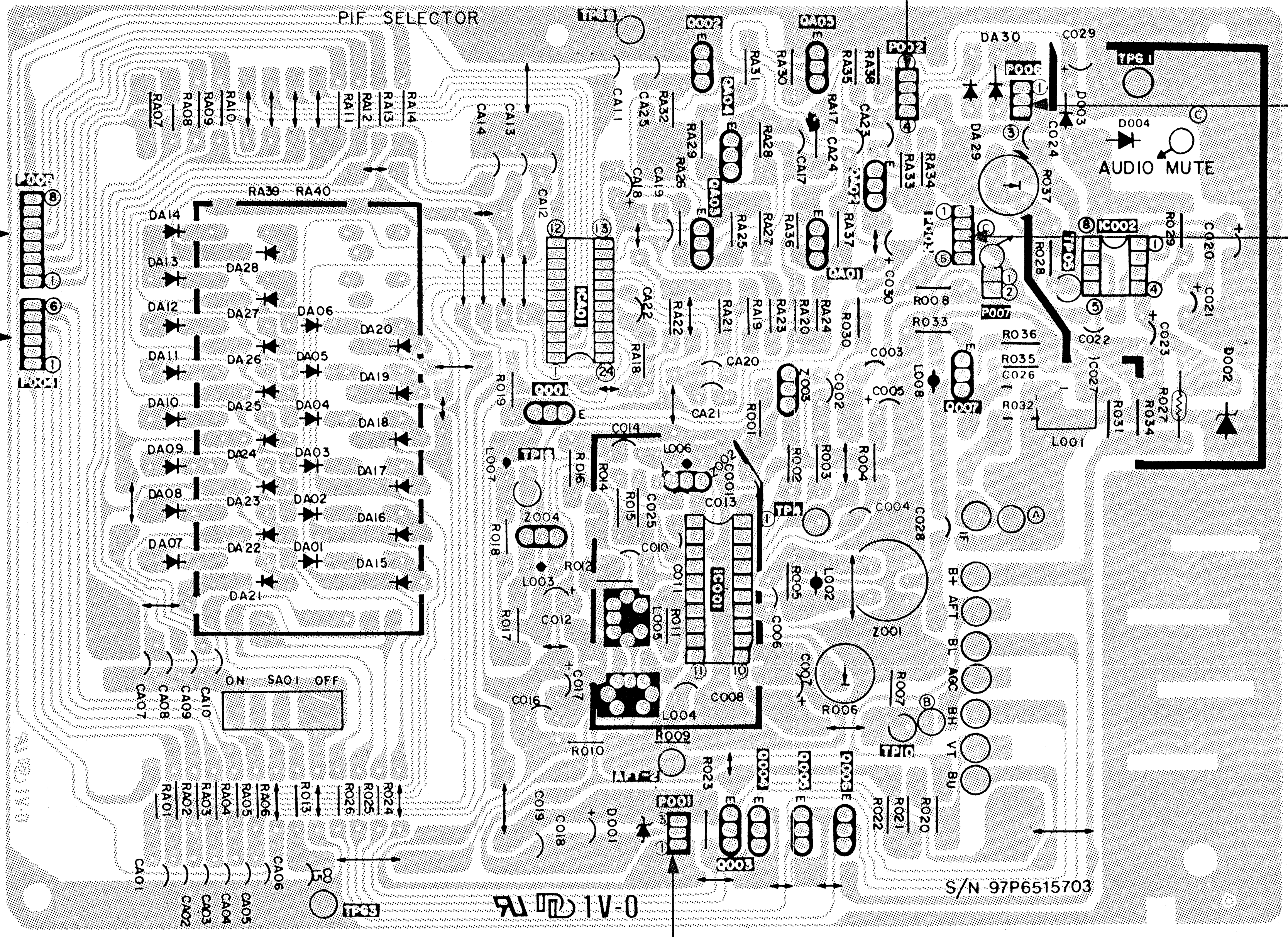
1	LED +B
2	CH UP
3	CH DOWN
4	GND

P005

1	CH POSI 7
2	CH POSI 8
3	CH POSI 9
4	CH POSI 10
5	CH POSI 11
6	CH POSI 12
7	CH POSI 13
8	CH POSI 14

P006

1	CH UP
2	CH DOWN
3	GND


PIF SELECTOR
P002
P005
P004
P006
P007
P001
AUDIO MUTE
DA30
D004
D003
D002
D001
IC001
IC002
ICA01
ON SA01 OFF
TP61
TP13
TP10
TP63
IF
B+
AFT
BL
AGC
BH
VT
BU
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1	HD PULSE
2	AUDIO OUT
3	GND
4	GND
5	VIDEO OUT

P004

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2	CH POSI 2
3	CH POSI 3
4	CH POSI 4
5	CH POSI 5
6	CH POSI 6

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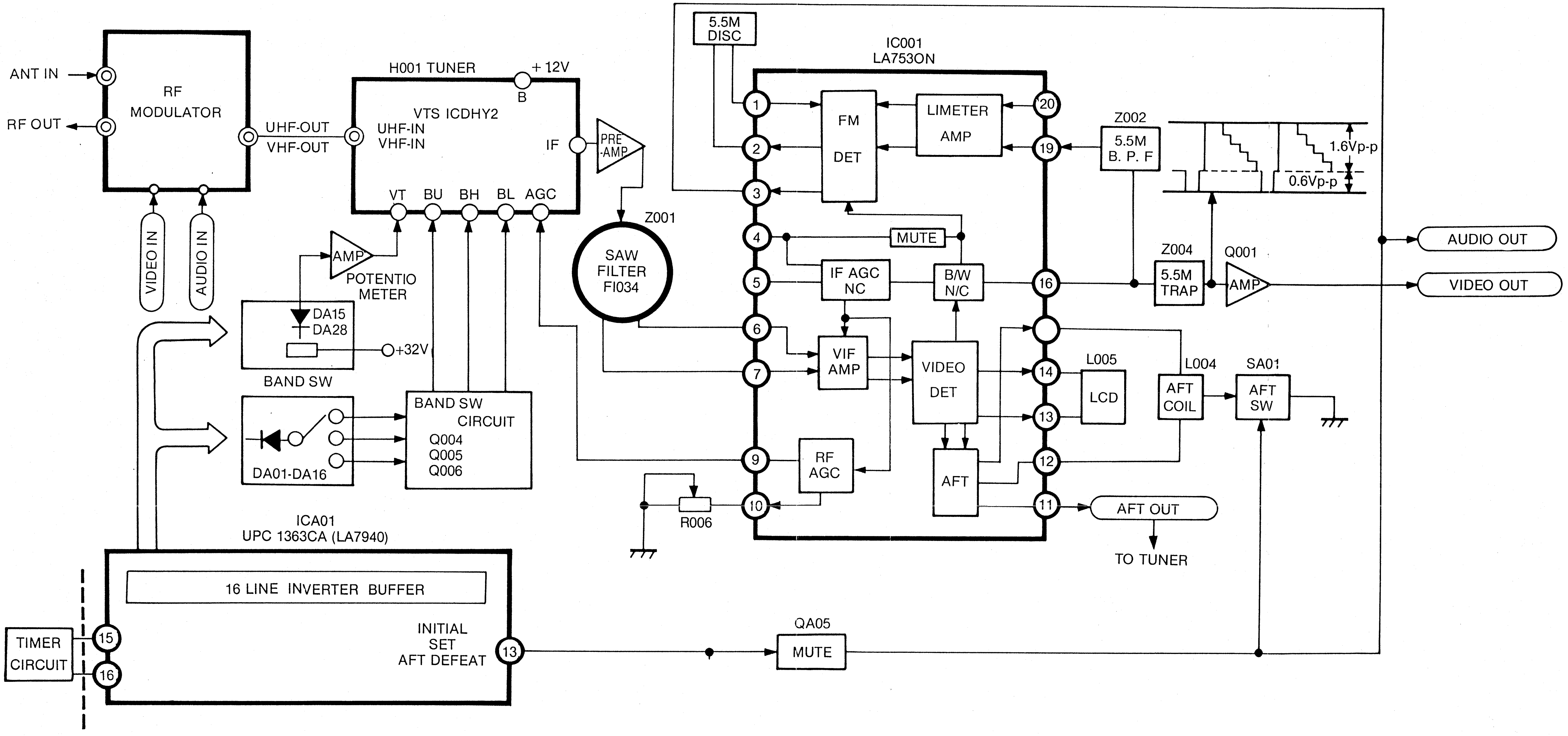
1	+12V
2	GND
3	+32V

PIF SELECTOR BLOCK DIAGRAM (30 DAP GAA, 30 DAP GBA)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Q006
ICA01
UPC 1363CA (LA7940)
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INITIAL SET AFT DEFEAT
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R006
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QA05
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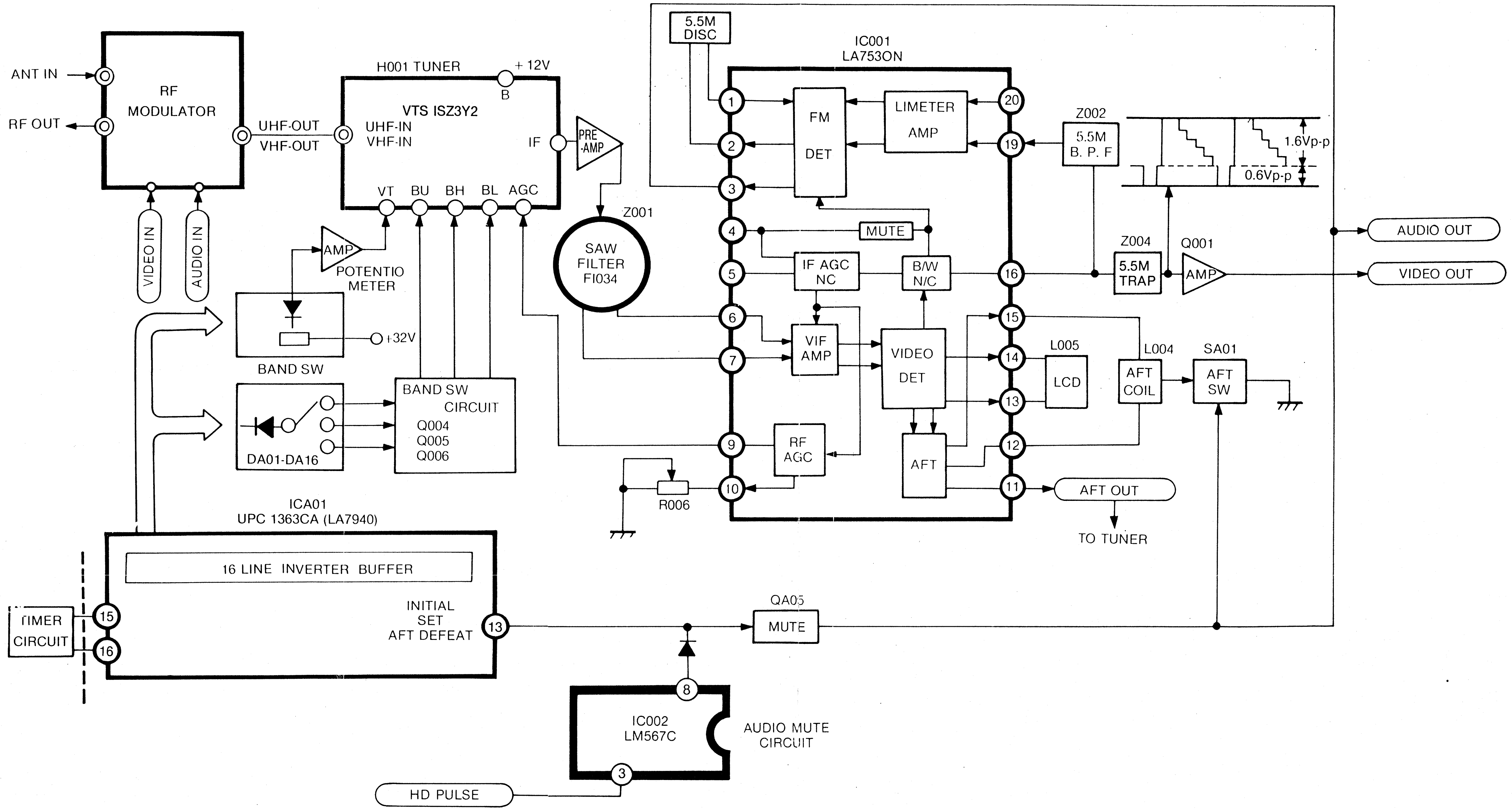
PIF SELECTOR BLOCK DIAGRAM (50 DAP GAB)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VIDEO IN
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POTENTIO METER
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DA01-DA16
BAND SW CIRCUIT
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Q005
Q006
Z001
SAW FILTER FI034
5.5M DISC
IC001
LA7530N
FM DET
LIMETER AMP
MUTE
IF AGC NC
B/W N/C
VIF AMP
VIDEO DET
RF AGC
AFT
R006
Z002
5.5M B. P. F
1.6Vp-p
0.6Vp-p
Z004
5.5M TRAP
Q001
AMP
AUDIO OUT
VIDEO OUT
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LCD
L004
AFT COIL
SA01
AFT SW
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ICA01
UPC 1363CA (LA7940)
16 LINE INVERTER BUFFER
INITIAL SET AFT DEFEAT
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TIMER CIRCUIT
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QA05
MUTE
IC002
LM567C
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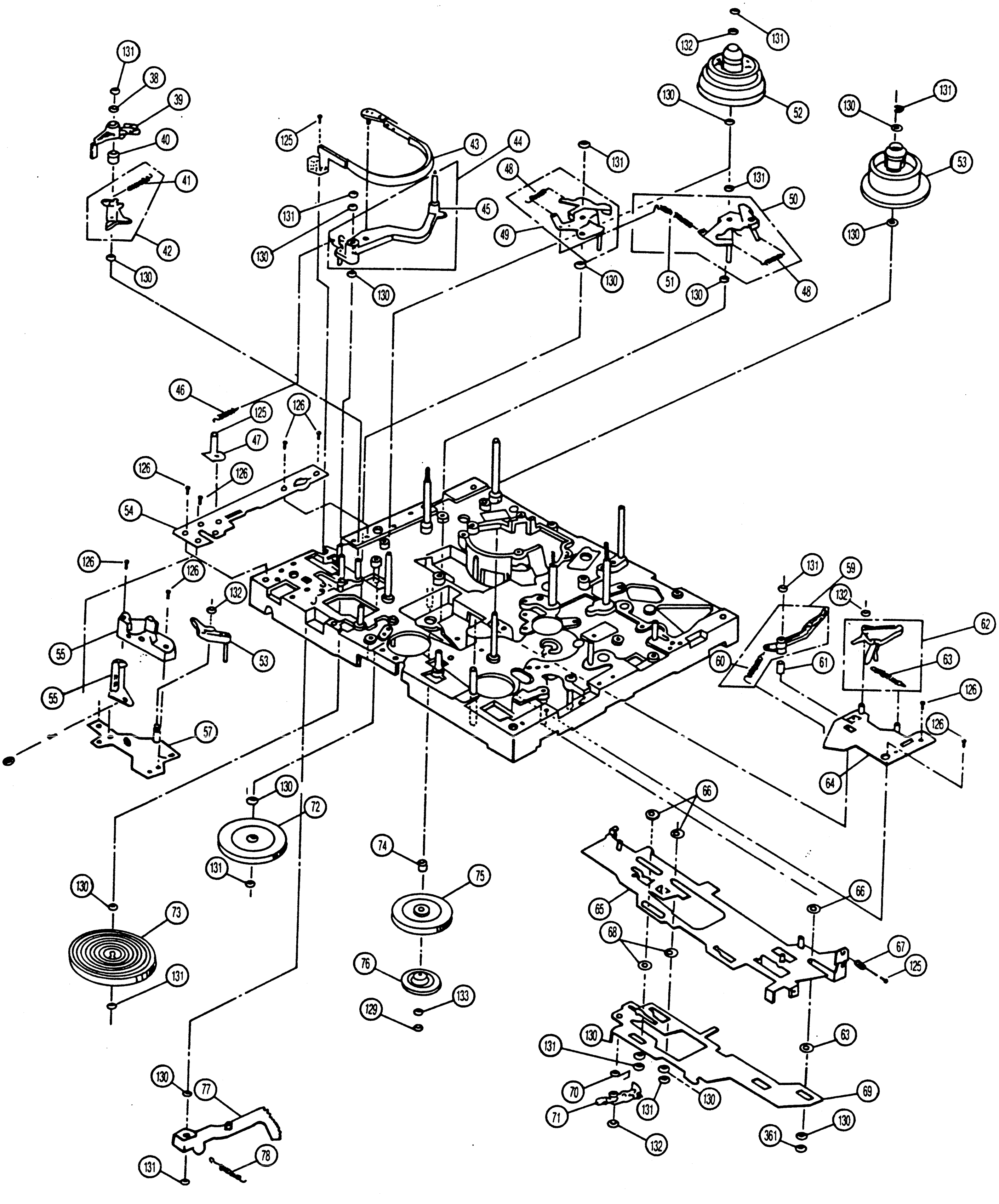
AUDIO MUTE CIRCUIT
HD PULSE

SECTION 5 EXPLODED VIEWS AND PARTS LIST

5-1 EXPLODED VIEWS

5-1-1 Exploded View of Deck Assembly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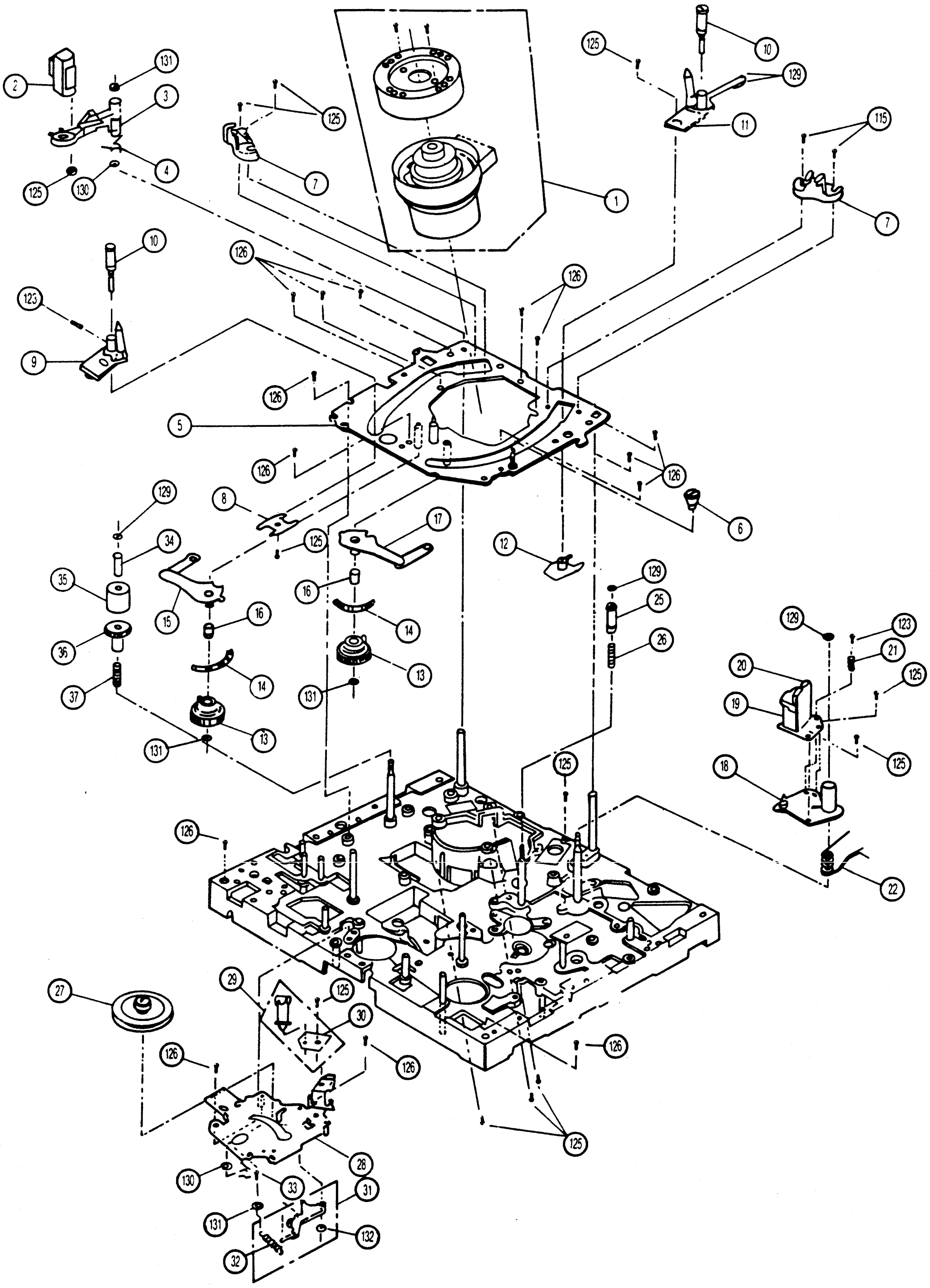
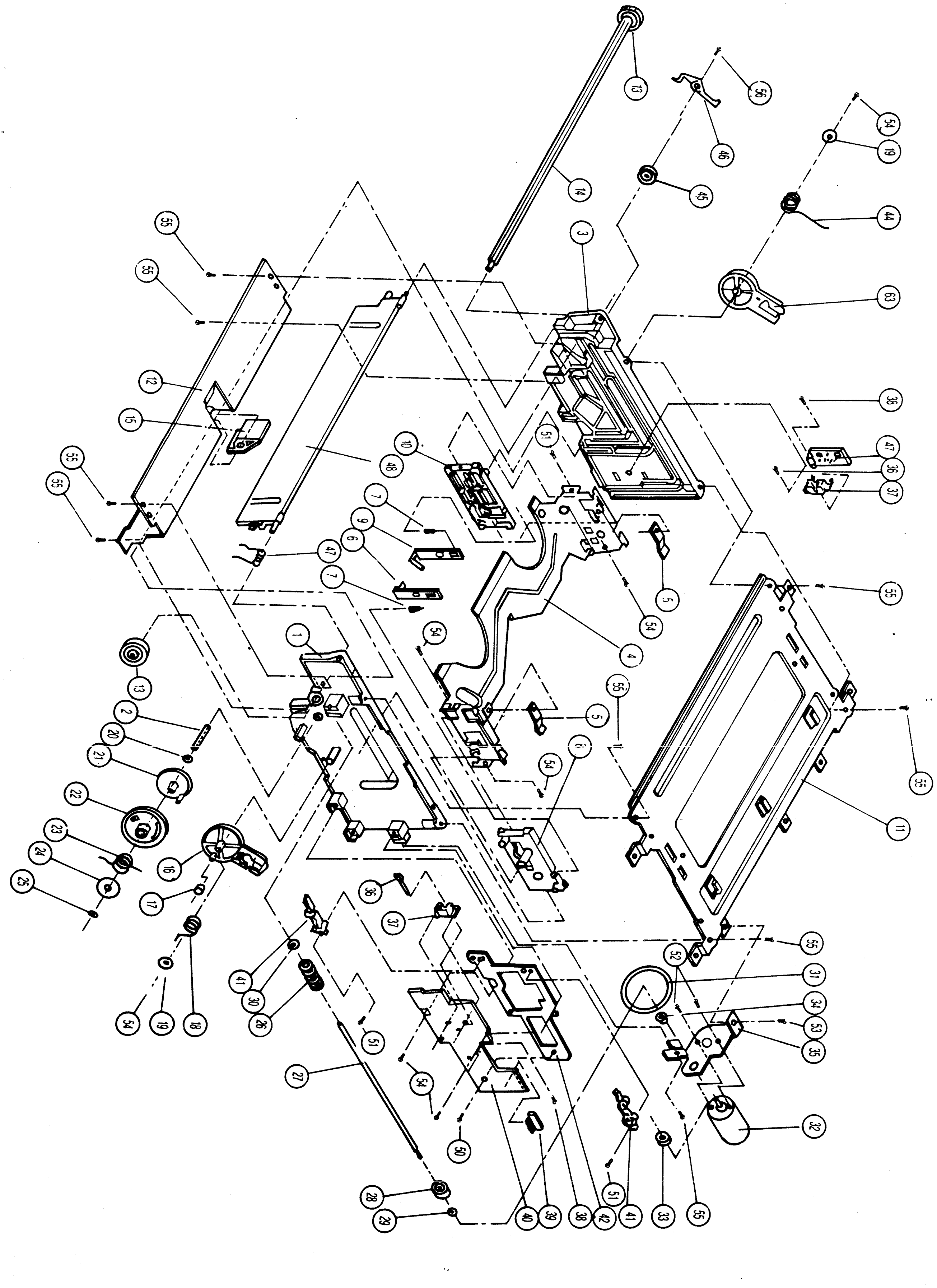


5-1-2 Exploded View of Front Loading Assembly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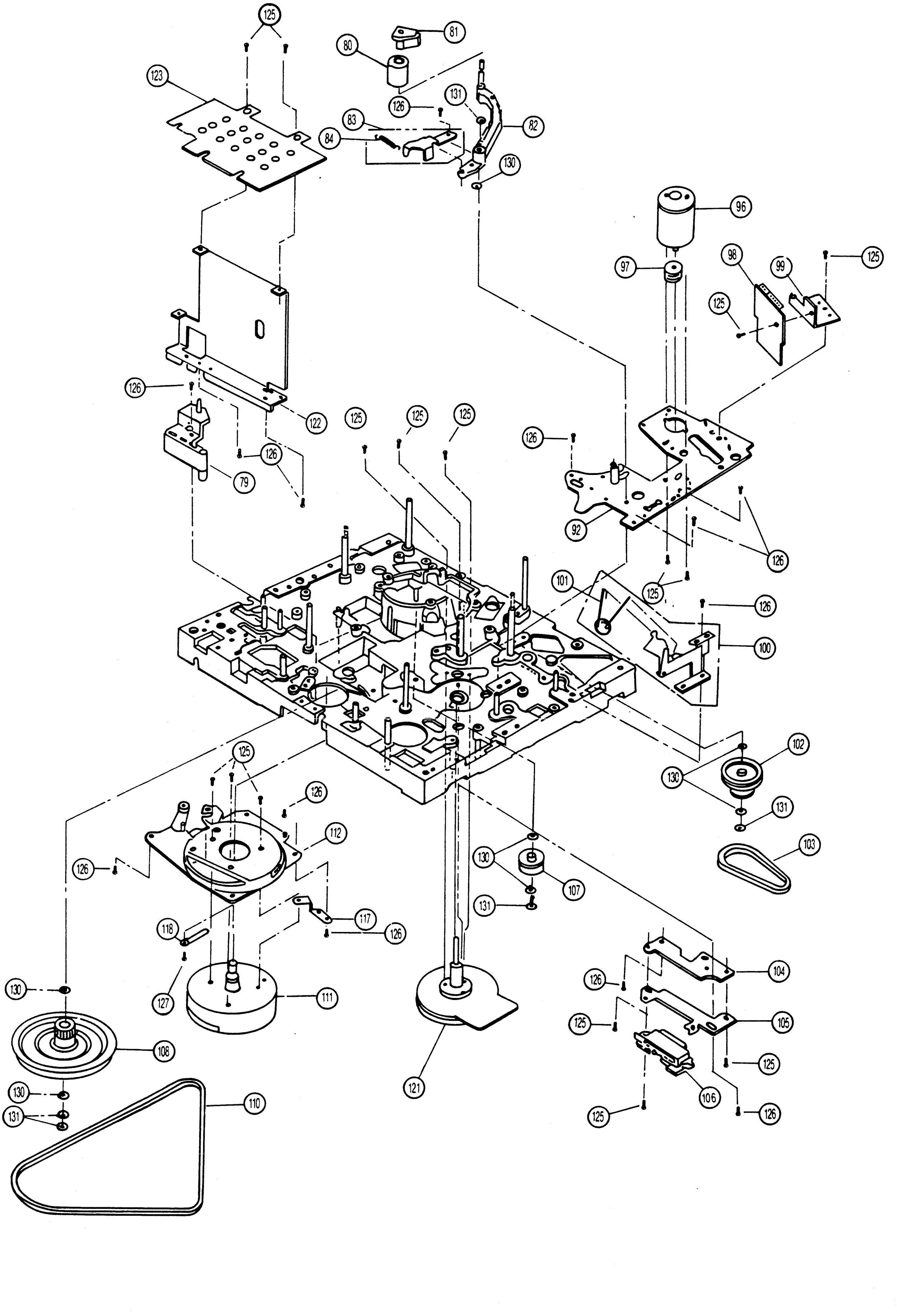
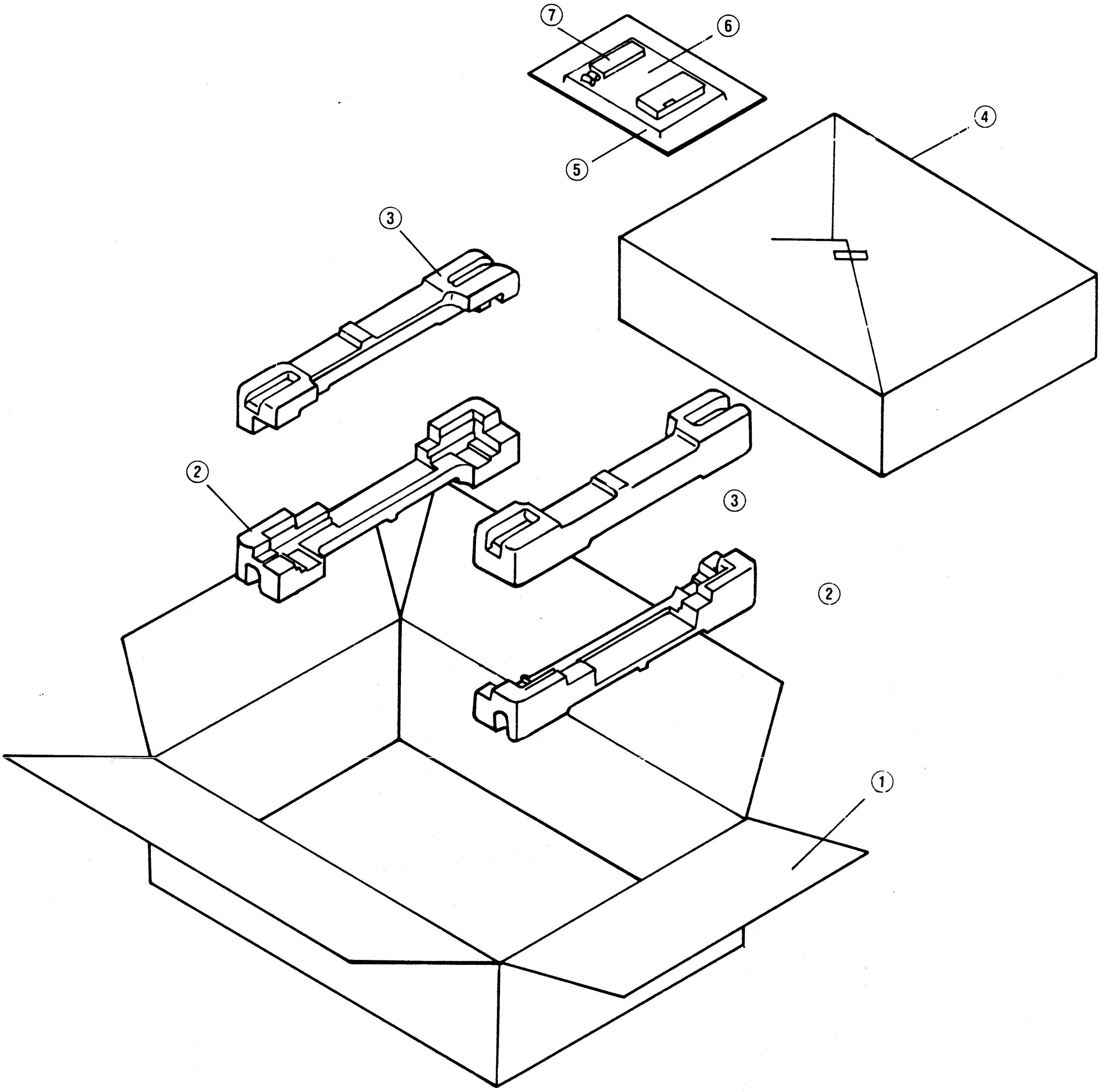
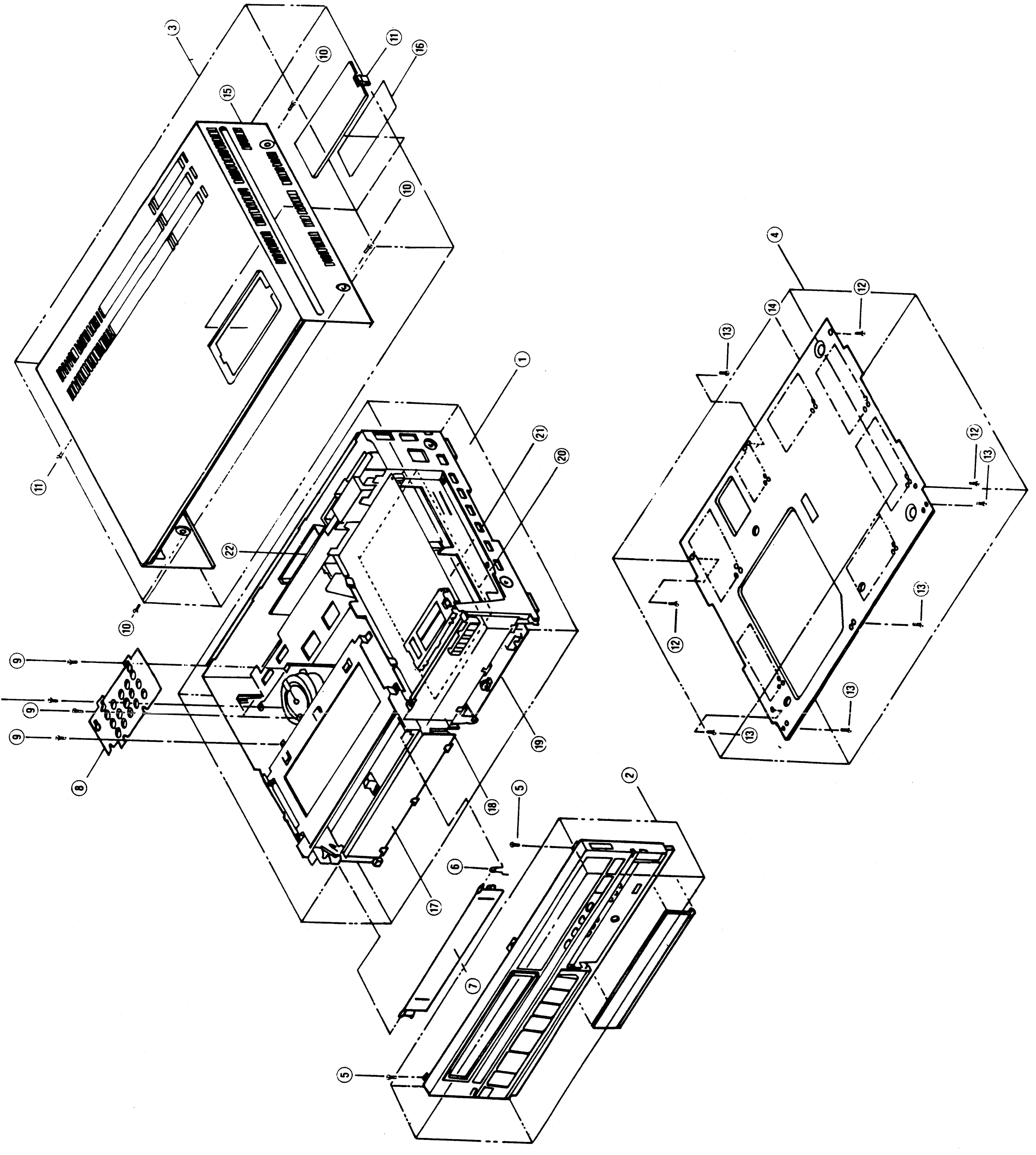


5-1-3 Exploded View of Packing Part



5-1-4 Exploded View of Overall Set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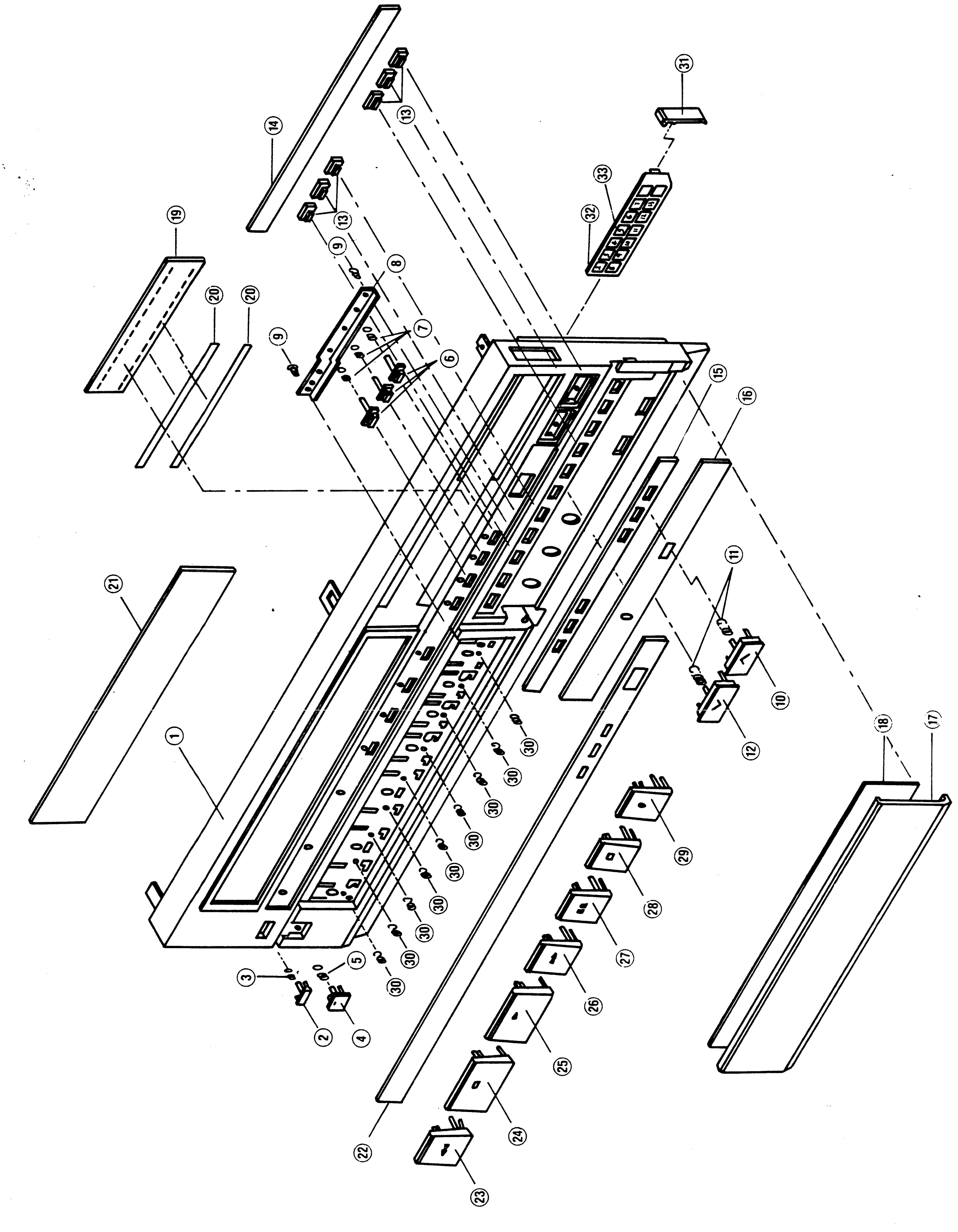
5-1-5 Exploded View of Front Panel



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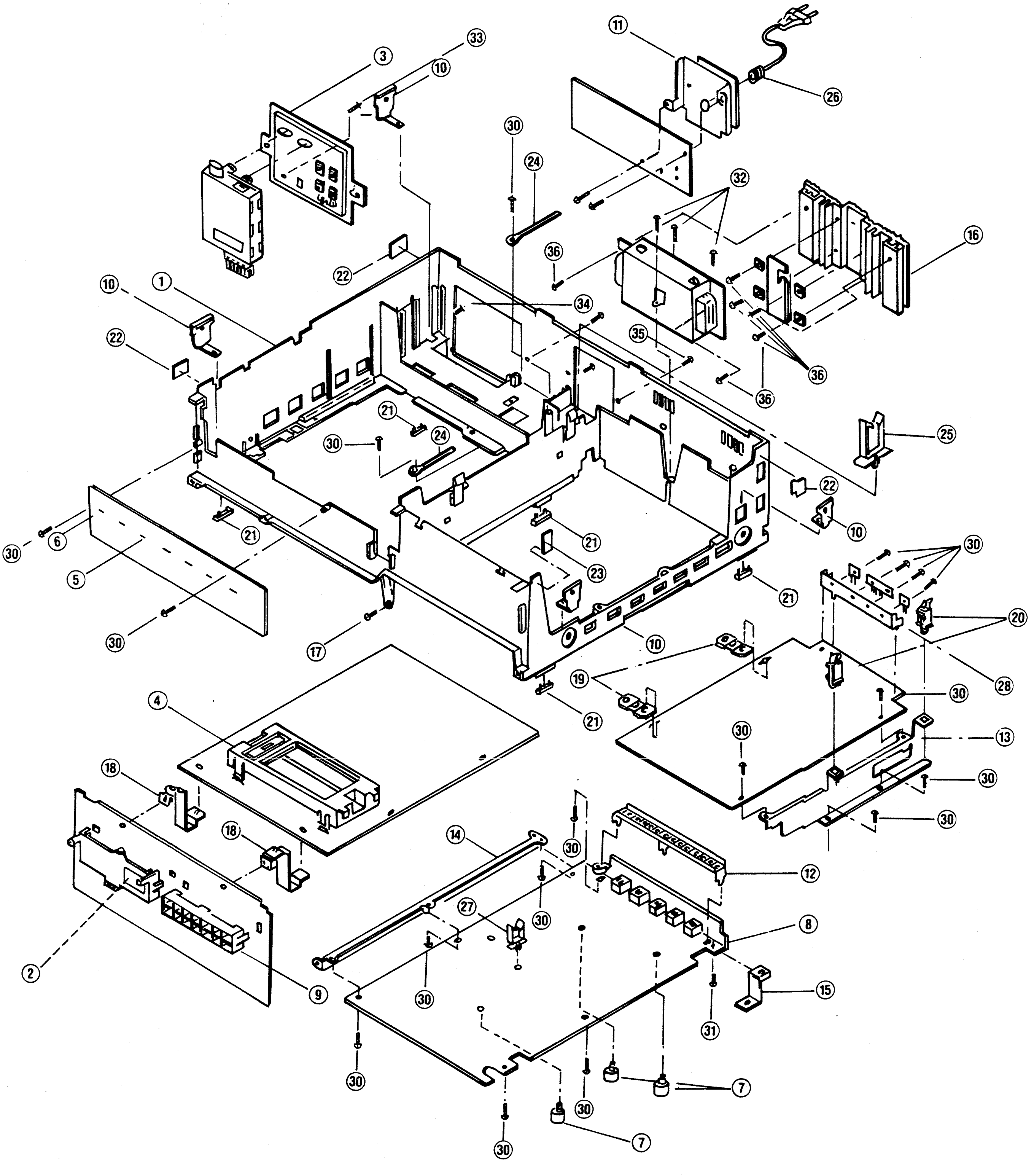
5-1-6 Exploded View of Main Chassis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5-2. PARTS LIST

5-2-1. Parts List of Deck Mechanism

NO.	STOCK NUMBER	PART NAME
1	97SA20400	DRUM TOTAL AS
2	97S8000600	FE HEAD
3	97S2304400	FE HEAD HOLDER
4	97S3007500	FE HEAD HOLDER SPG
5	97S416800	PLATE SLIDE AS
6	97S0406000	ADJUST CAP
7	97S5701000	V-BLOCK
8	97S1400600	S SPG POLE BASE
9	97SA502800	POLE BASE S AS
10	97S501100	GUIDE ROLLER AS
11	97SA503200	T SPG POLE BASE AS
12	97SA502900	POLE BASE T AS
13	97SA501400	LOADING GEAR AS
14	97S3005300	LOADING GEAR SPG
15	97SA501500	L LOADING LEVER AS
16	97S2303600	LOADING GEAR HOLDER
17	97SA501700	R LOADING LEVER AS
18	97S419000	AC HEAD ADJ PLT AS
19	97SA418900	AC HEAD AS
20	97SA429200	AC HEAD PCB AS
21	97S3007800	AC HEAD GUIDE SPG
22	97S3007700	AC HEAD ADJUST SPG
25	97S2802500	TAPE GUIDE SPACER
26	97S3006600	GUIDE ADJUST SPG
27	97SA417500	IDLER AS
28	97SA417600	IDLER PLATE AS
29	97SA502400	LED SENSOR AS
30	97P6514112	LED SENSOR PCB
31	97SA438300	IDLER LEVER AS
32	97S3005600	IDLER LEVER SPG
33	97S3005700	IDLER ADJUST SPG
34	97S2808000	IMP ROLLER SPACER
35	97S3702600	IMPEDANCE ROLLER
36	97S1401600	LIMITER WASHER
37	97S3007600	IMP ADJUST SPG
38	97S0406600	BRAKE LEVER CAP
39	97SA419200	SUB BRAKE LEVER AS
40	97S3007100	SUB LEVER SPG
41	97S3007000	SUB BRAKE SPG
42	97SA419100	SUB BRA SHIFT LVR AS
43	97SA431000	BAND BRAKE AS
44	97SA430900	TENSION ARM AS
45	97S2304200	TENSION POLE HOLDER
46	97S3006900	TENSION SPG
47	97S2304300	TENSION SPG HOLDER

NO.	STOCK NUMBER	PART NAME
48	97S3007200	BRAKE BASE SPG
49	97SA321900	SUPPLY REEL BRA AS
50	97SA322000	T-U REEL BRAKE AS
51	97S3007300	REEL BRAKE SPG
52	97SA321300	S REEL TABLE AS
53	97SA321400	T REEL TABLE AS
54	97S0905800	GUIDE PLATE
55	97S2303900	REC SAFETY SW HOLDER
56	5SD0101012	REC SAFETY SW (MSW-1595C)
57	97SA419600	REC SAFETY BRKT AS
58	97SA430700	SUB BRA ADJ LVR AS
59	97SA430600	SOFT BRAKE LEVER AS
60	97S3006500	SOFT BRAKE SPG
61	97S2802400	SOFT BRAKE SPACER
62	97SA430500	T SUB BRAKE LVR AS
63	97S3006400	T SUB BRAKE SPG
64	97SA430400	BRAKE PLATE AS
65	97SA429800	CONNECT PLATE AS
66	97S5900400	GUIDE COLLAR B
67	97S3005800	CONNECT SPG
68	97S5900500	GUIDE COLLAR A
69	97SA503700	CONNECT SUB PLATE AS
70	97S3005900	RATCHET LOCK SPG
71	97S2602200	RATCHET LOCK LEVER
72	97S2702200	GEAR A
73	97S2702300	CAM GEAR
74	97S2802800	GEAR B SPACER
75	97S2802800	GEAR B SPACER
76	97S0406900	GEAR B COVER
77	97S2702000	RACK GEAR
78	97S3006000	CONNECT SUB SPG
79	97S2304600	CST KEY
80	97SA418500	PINCH ROLLER AS
81	97S0406400	PINCH ROLLER CAP
82	97SA418300	PINCH LEVER AS
83	97SA418400	PINCH SUB LEVER AS
84	97S3006700	PINCH ROLLER SPG
92	97SA429300	PUSH LEVER BRKT AS
96	97S8100500	LC MOTOR
97	97S3702100	LC MOTOR PULLEY
98	97SA503300	LC MOTOR PCB AS
99	97S2403700	PCB BRKT
100	97SA322100	CST DOOR OPENER AS
101	97S3007400	CST OPENER SPG

NO.	STOCK NUMBER	PART NAME
102	97S3702500	PULLEY B
103	97S5500600	LC BELT
104	97S2404100	CAM SW BRKT AS
105	97S2304100	CAM SW HOLDER
106	5S30407011	CAM SW (EVQ-WUJ001)
107	97S3702400	GUIDE PULLEY
108	97S3702300	PULLEY A
110	97S5500700	DRIVE BELT
111	97S8100400	REEL MOTOR
112	97SA417400	REEL MOTOR BRKT AS
117	97S0905000	EARTH PLATE
118	97S4600200	WIRE CLAMP M
119	97S2701800	BRAKE GEAR.

NO.	STOCK NUMBER	PART NAME
121	97S8101000	CAPSTAN MOTOR
122	97P2409200	MAIN BASE BRKT (B)
123	97P0413000	CYLINDER COVER
125		SCREW MACHINE
126		SCREW TAPTITE
127		SCREW TAPPING
128		SCREW SET
129		NUT HEX
130		POLY SLIDER
131		RING G
132		RING E
133		WASHER SPG

5-2-2. Parts List of Front Loading Assembly

NO.	STOCK NUMBER	PART NAME
1	97P2408500	GUIDE BRKT R
2	97P3508300	WORM WHEEL POST
3	97P2408400	GUIDE BRKT L
4	97P2408600	CST HOLDER BRKT
5	97P3011700	CST UPPER SPG
6	97P4600800	SAFETY LEVER R
7	97P3011600	SAFETY LEVER SPG
8	97P5200800	CST HOLDER SLIDER R
9	97P4600900	SAFETY LEVER L
10	97P5200900	CST HOLDER SLIDER L
11	97P2408700	TOP BOARD BRKT
12	97P0909700	CST GUIDE PLATE
13	97P2703600	DRIVE GEAR
14	97P3602700	GEAR SHAFT
15	97P2605500	DOUBLE LEVER
16	97P2703700	LOADING GEAR
17	97P3510400	ADJUST PIN
18	97P3011400	LOADING GEAR SPG
19	97P3105400	WASHER
20	97P3903600	POLY SLIDER
21	97P2703800	GUIDE RING GEAR
22	97P2903500	WORM WHEEL
23	97P3011500	WORM WHEEL SPG
24	97P3105500	WASHER PLAIN A
25	7402002008	E-RING
26	97P2703900	WORM GEAR
27	97P3602800	WORM SHAFT
28	97P3704400	WORM PULLEY

NO.	STOCK NUMBER	PART NAME
29	97S3904600	POLY SLIDER
30	97S3904700	POLY SLIDER
31	97P5501100	LOADING BELT
32	97P8101500	FRONT LOADING MOTOR
33	97P3704500	MOTOR PULLEY
34	97P5300100	BEARING B
35	97P2501200	MOTOR GUIDE
36	DPN15DV—	PHOTO HOLDER
37	97P2308800	PHOTO HOLDER
38	CCXF1H120Z	C-CERA
39	97P61239WH	CONNECT WAFER
40	97P6514107	F/LOADING MOTOR PCB
41	5SD0101048	LEAF SWITCH
42	97P2408800	MOTOR PCB BRKT
43	97P2703500	CAM GEAR
44	97P3011300	CAM GEAR SPG
45	97P2703400	SUN GEAR
46	97P2605300	DOOR OPEN LEVER
47	97P6514115	END SENSOR PCB
48	97P1801600	F/LOADING DOOR
49	9713011900	F/LOADING-DOOR SPG
50	7001200511	MACHINE SCREW
51	7051200811	MACHINE SCREW
52	70511300411	MACHINE SCREW
53	7051300611	MACHINE SCREW
54	7121260611	TAPPING SCREW
55	7121300811	TAPPING SCREW
56	7621260611	TAPPING SCREW

5-2-3. Part List of Deck Mechanism

NO.	STOCK NUMBER	PART NAME
1	97P5003100	CARTON BOX
2	97P4202700	CUSHION BOTTOM
3	97P4202600	CUSHION TOP
4	97P4801300	POLYBAG FOR SET
5	97P6001800	TRAY
6	97PA409900	CONNECTOR CABLE
7	97PA204720	REMOCON HAND SET

5-2-4. Parts List of Overall Set

NO.	STOCK NUMBER	PART NAME
1	97PA102300	MAIN CHASSIS AS
2	97PA102300	FRONT PANEL AS
3	97PA102500	TOP COVER AS
4	97PA102600	BOTTOM SHIELD AS
5	7124300611	TAPPING SCREW
6	97P3011900	F/L DOOR SPG
7	97P1801600	FRONT LOADING DOOR
8	97P041300	CYLINDER COVER
9	7274300611	TAPTITE SCREW
10	7003400812	MACHINE SCREW
11	97P1801400	TOP COVER DOOR
12	7001301211	MACHINE SCREW
13	7124300811	TAPPING SCREW
14	97P0413100	BOTTOM COVER
15	97P0413200	TOP COVER
16	97P0913600	PIF PLATE
17	97P6514104	LOGIC CONTROL PCB
18	97P6514902	TIMER PCB
19	97P6514100	VIDEO PCB
20	97P6514101	SERVO LOGIC PCB
21	97P6514102	PIF SELECTOR PCB
22	97P6514105	LINE FILTER

5-2-5. Parts List of Front Panel

NO.	STOCK NUMBER	PART NAME
1	97P0300900	FRONT PANEL
2	97P1306100	EJECT KNOB
3	97P3012100	EJECT KNOB SPG
4	97P1306200	POWER KNOB
5	97P3013300	POWER KNOB SPG
6	97P1306300	MEMORY KNOB
7	97P3012400	MEMEORY KNOB SPG
8	97P2409700	KNOB GUIDE BRKT
9	7124300611	SCREW TAPPING
10	97P1306500	UP/DOWN SWITCH KNOB
11	97P3012200	UP/DOWN KNOB SPG
12	97P1306500	UP/DOWN SWITCH KNOB
13	97P1306600	TIMER SETTING KNOB
14	97P4202500	T-S KNOB CUSHION
15	97P0910400	T-S KNOB PLATE
16	97P0910500	TRACKING KNOB PLATE
17	97P1801200	PANEL DOOR
18	97P0913500	PANEL DOOR PLATE
19	97P0910700	TIMER PLATE
20	2TE12703CL	DOUBLE TAPE
21	97P1601200	TIMER WINDOW
22	97P1601300	PANEL WINDOW
23	97P1306700	REW/REV KNOB
24	97P1306800	STOP KNOB
25	97P1306900	PLAY KNOB
26	97P1307000	FF/CUE KNOB
27	97P1307100	PAUSE/STILL KNOB
28	97P1307200	TV/VCR KNOB
29	97P1307300	REC KNOB
30	97P3012300	FUNCTION KNOB SPG
31	97P1801300	SIDE DOOR
32	97P2309900	TAB HOLDER
33	97P9600600	TAB SHEET

5-2-6. Parts List of Main Chassis

NO.	STOCK NUMBER	PART NAME
1	97P0603200	MAIN CHASSIS
2	97P2309100	TIMER GUIDE HOLDER
3	97P0700700	ANTENNA BOARD
4	97P2309300	CHANNEL SETTING HOLDER
5	97P2309600	LAMP LED HOLDER L
6	97P2309400	LAMP LED HOLDER P
7	97P2501300	VIDEO PCB GUIDE
8	97P2309700	A/VIDEO INPUT HOLDER
9	97P2309200	CHANNEL LED HOLDER
10	97P2408900	MAIN CHASSIS BRACKET
11	97P2409300	AC CORD BRACKET
12	97P2410000	A/VIDEO INPUT JACK BRKT
13	97P2409400	SERVO PCB BRACKET
14	97P2409500	VIDEO PCB BRACKET
15	97P3012000	VIDEO EARTH SPRING
16	97P4401900	P/TRANS RADIATOR
17	97P3400900	VIDEO INPUT RIVET
18	97P2311300	TIMER PCB HOLDER
19	97P2309000	SERVO LOGIC PCB HOLDER
20	97P2311400	SELECTOR PCB HOLDER
21	97P4202400	FOOT CUSHION
22	97P4203200	MAIN CHASSIS CUSHION A
23	97P4203300	MAIN CHASSIS CUSHION B
24	97S4600200	WIRE CLAMP "M"
25	4856812200	WIRE SADDLE
26	47P1501600	POWER CORD HOLDER
27	47P1502900	WIRE HOLDER C
28	97P4401500	SERVO LOGIC RADIATOR
29	7124300611	TAPPING SCREW
30	7124300811	TAPPING SCREW
31	7124301011	TAPPING SCREW
32	7124401211	TAPPING SCREW
33	7003260612	MACHINE SCREW
34	7123301012	TAPPING SCREW
35	7003300812	MACHINE SCREW
36	7274300611	TAPTITE SCREW

SECTION 6. ELECTRICAL PARTS LIST

6-1. STANDARD PART NUMBER CODING

6-1-1 Resistor Coding

1. Fixed Resistor Coding

Type of Resistor

C	Composition Resistor
D	Carbon Resistor
F	Fusible Resistor
K	Ceramic Resistor
N	Metal Film Resistor
S	Metal-Oxide Film Resistor
W	Wire Wound Resistor
X	Cement Resistor
Y	Chip Resistor

Rated Wattage

Code	Wattage
−A	1/6 W
−8	1/8 W
−4	1/4 W
−2	1/2 W
01	1W
02	2W

Distance

Code	Distance
A	2.5 mm
B	5.0 mm
C	7.5 mm
D	10.0 mm
E	12.5 mm
F	15.0 mm
G	17.5 mm
H	20.0 mm
J	22.5 mm
K	25.0 mm
X	Auto Insertion
Z	Auto Insertion

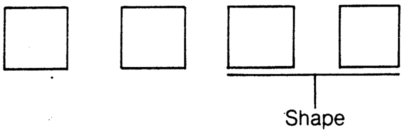
Value

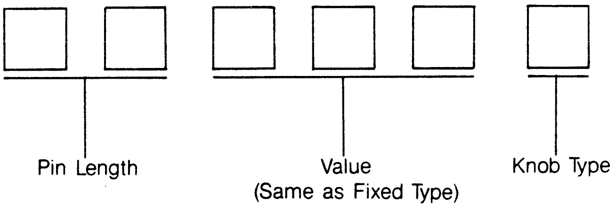
Example	
478	0.47Ω
479	4.7Ω
470	47Ω
471	470Ω
472	472Ω
473	47Ω

Tolerance

Symbol	Tolerance
F	±1%
G	±2%
J	±5%
K	±10%
M	±20%
N	±30%

2. Semi-Fixed Resistor Coding

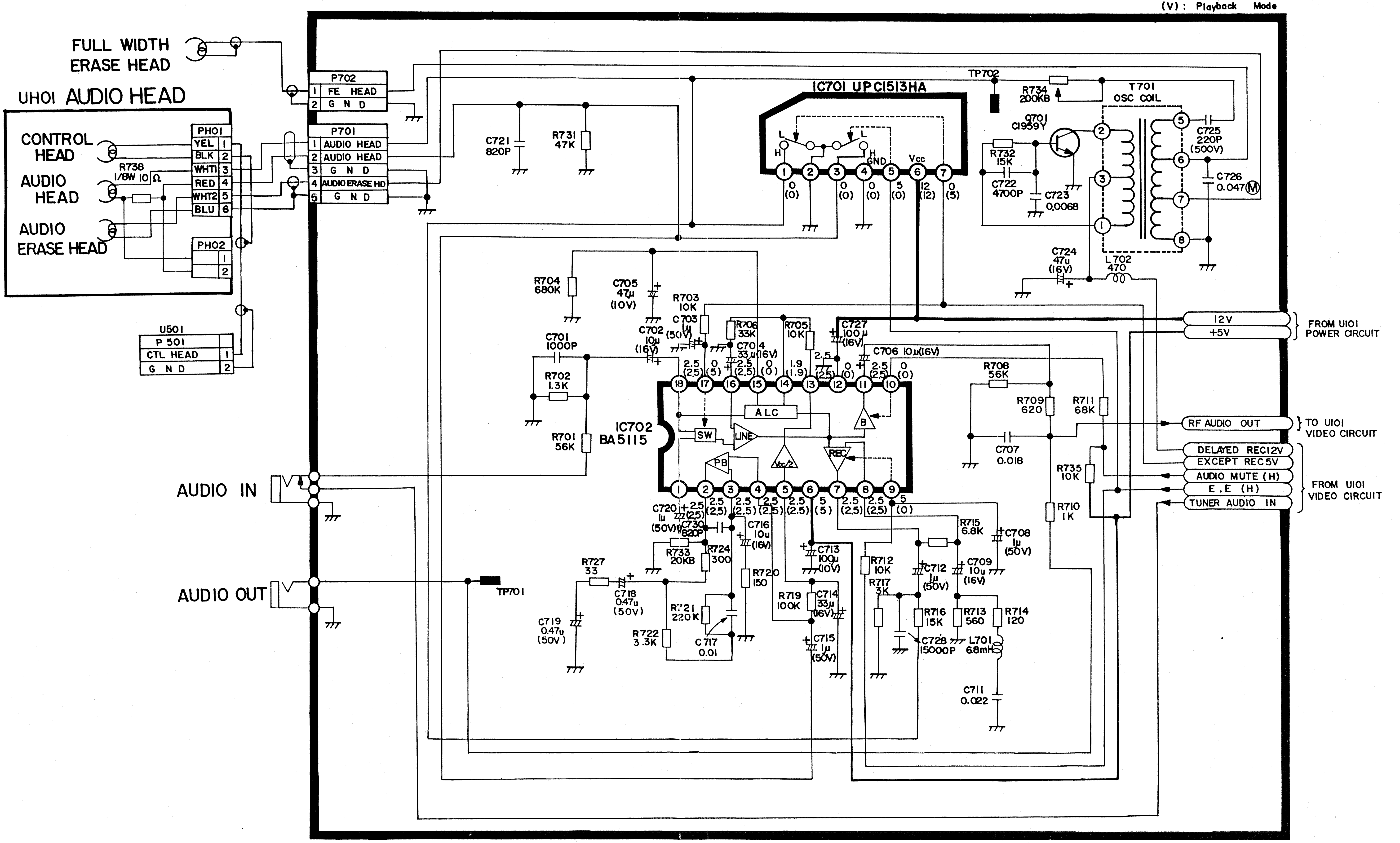




Meterial		Shape	Knob		Code
CARBON FILM	1	VERTICAL	WITH	1	11
			WITHOUT	2	12
		HORIZONTAL	WITH	3	13
			WITHOUT	4	14
METAL GRAZE	5	VERTICAL	WITH	1	21
			WITHOUT	2	22
		HORIZONTAL	WITH	3	23
			WITHOUT	4	24
CARBON SOLID	5	VERTICAL	WITH	1	51
			WITHOUT	2	52
		HORIZONTAL	WITH	3	53
			WITHOUT	4	54
CERMIET	6	VERTICAL	WITH	1	61
			WITHOUT	2	62
		HORIZONTAL	WITH	3	63
		WITHOUT	4	64	

U201 AUDIO CIRCUIT

V : Recording Mode
(V) : Playback Mode


FULL WIDTH ERASE HEAD
UH01 AUDIO HEAD
CONTROL HEAD
AUDIO HEAD
AUDIO ERASE HEAD
R738 1/8W 10Ω
PH01
YEL 1
BLK 2
WHT1 3
RED 4
WHT2 5
BLU 6
PH02
1
2
U501
P 501
CTL HEAD 1
G N D 2
P702
1 FE HEAD
2 G N D
P701
1 AUDIO HEAD
2 AUDIO HEAD
3 G N D
4 AUDIO ERASE HD
5 G N D
C721 820P
R731 47K
IC701 UPC1513HA
L
H
GND
Vcc
TP702
R734 200KB
T701 OSC COIL
Q701 C1959Y
R732 15K
C722 4700P
C723 0.0068
C725 220P (500V)
C726 0.047 M
C724 47u (16V)
L702 470
12V
+5V
FROM U101 POWER CIRCUIT
R704 680K
C705 47μ (10V)
R703 10K
C703 1μ (50V)
C702 10μ (16V)
C701 1000P
R702 1.3K
R701 56K
R706 33K
C704 33μ (16V)
R705 10K
C727 100μ (16V)
C706 10μ (16V)
IC702 BA5115
ALC
SW
LINE
B
PB
Vcc/2
REC
R708 56K
R709 620
R711 68K
C707 0.018
R735 10K
R710 1K
RF AUDIO OUT
TO U101 VIDEO CIRCUIT
DELAYED REC12V
EXCEPT REC5V
AUDIO MUTE (H)
E.E (H)
TUNER AUDIO IN
FROM U101 VIDEO CIRCUIT
AUDIO IN
AUDIO OUT
TP701
C720 1μ (50V)
C730 820P
R733 20KB
R724 300
C716 10u (16V)
R720 150
R727 33
C718 0.47u (50V)
C719 0.47u (50V)
R721 220K
R722 3.3K
C717 0.01
C713 100μ (10V)
R719 100K
C714 33μ (16V)
C715 1μ (50V)
R712 10K
R717 3K
R715 6.8K
C708 1μ (50V)
C712 1μ (50V)
C709 10u (16V)
R716 15K
C728 15000P
R713 560
R714 120
L701 6.8mH
C711 0.022

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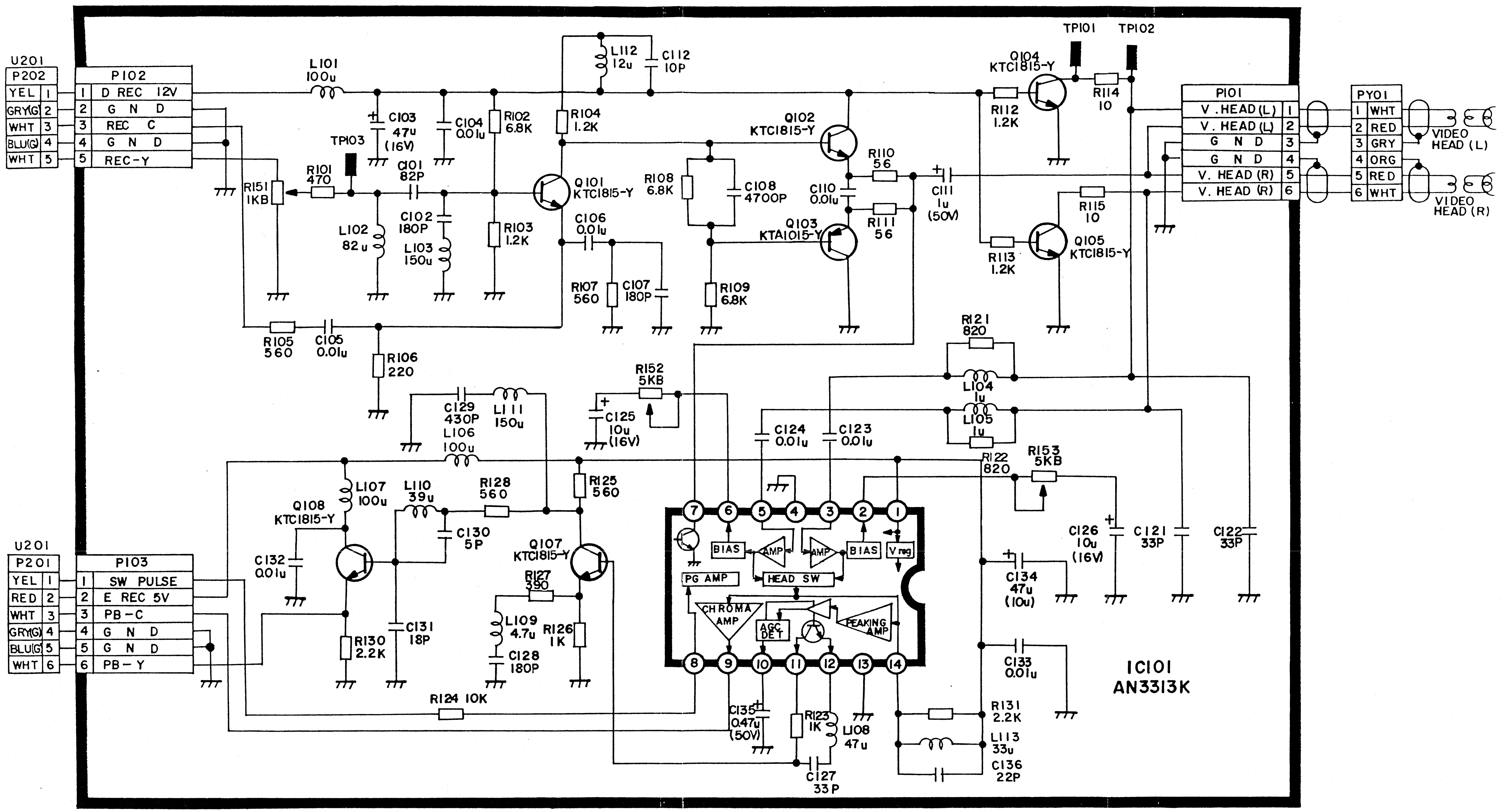
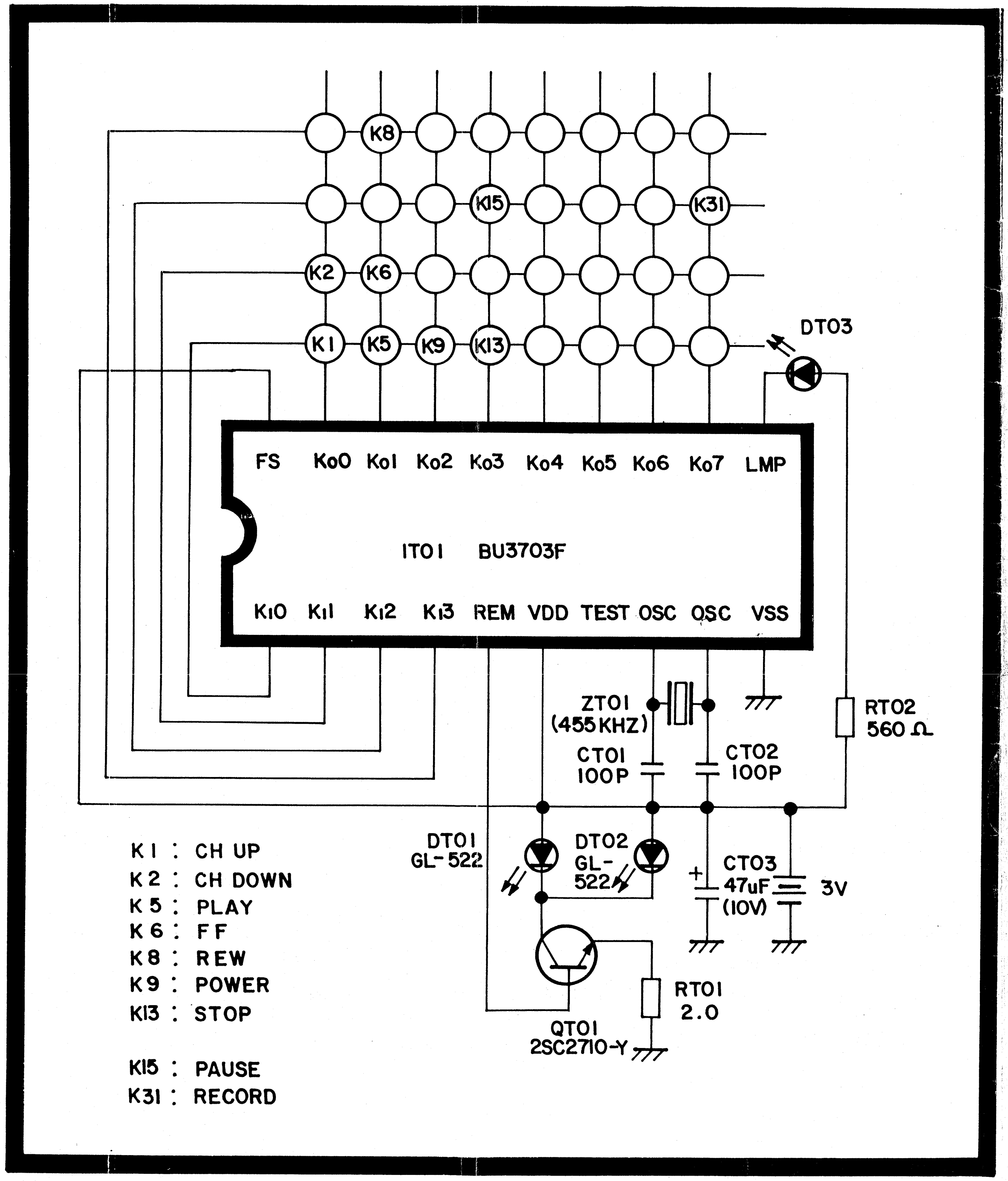
U101 HEAD - AMP CIRCUIT

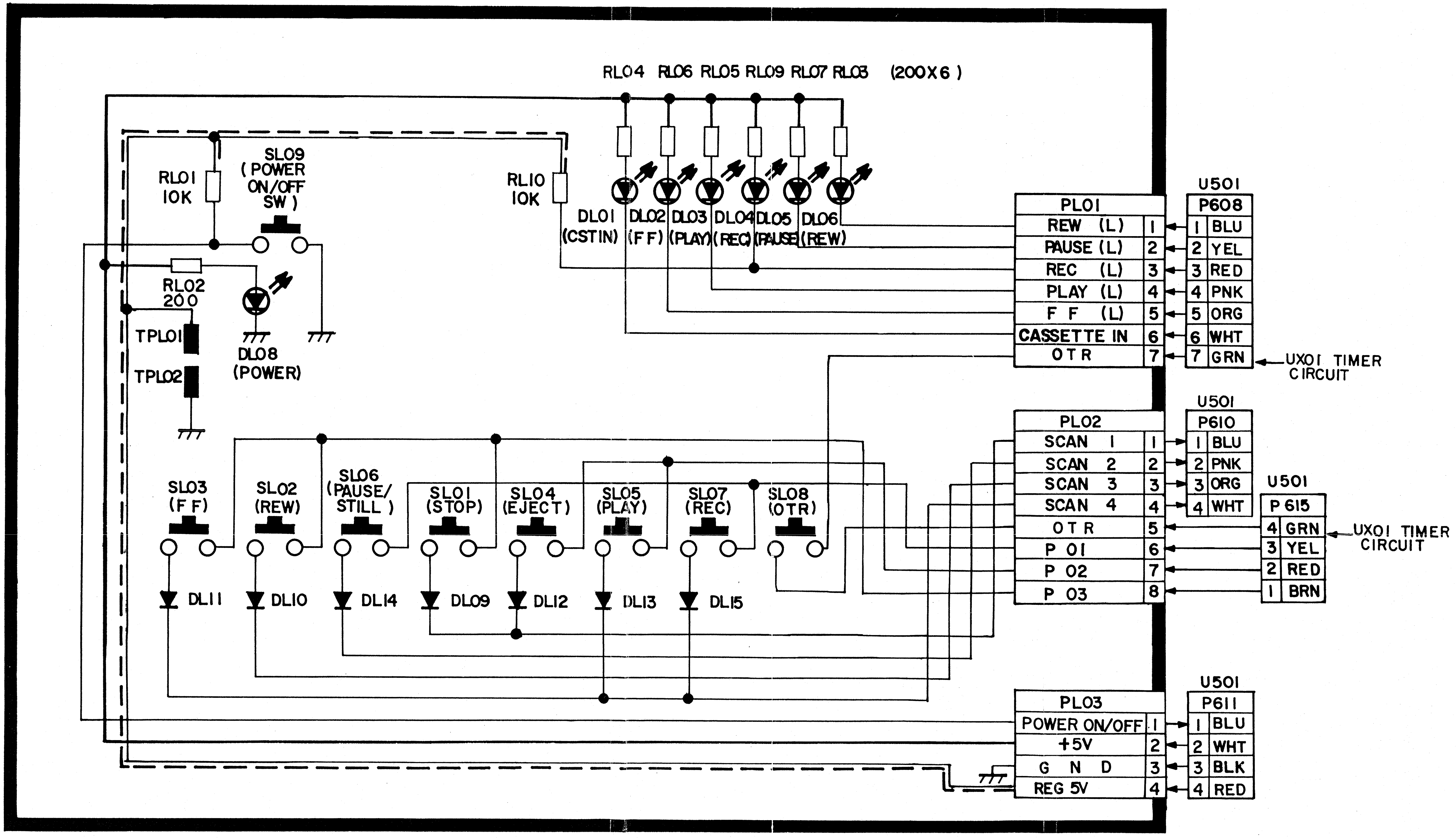

U201
P202
YEL 1
GRY(G) 2
WHT 3
BLU(G) 4
WHT 5
P102
1 D REC 12V
2 G N D
3 REC C
4 G N D
5 REC-Y
L101 100u
C103 47u (16V)
C104 0.01u
R102 6.8K
R104 1.2K
L112 12u
C112 10P
TP103
R101 470
C101 82P
R151 1KB
L102 82u
C102 180P
L103 150u
R103 1.2K
Q101 KTC1815-Y
C106 0.01u
R107 560
C107 180P
R108 6.8K
C108 4700P
R109 6.8K
Q102 KTC1815-Y
Q103 KTA1015-Y
C110 0.01u
R110 56
R111 56
C111 1u (50V)
R105 560
C105 0.01u
R106 220
TP101
TP102
Q104 KTC1815-Y
R112 1.2K
R114 10
R115 10
R113 1.2K
Q105 KTC1815-Y
P101
V.HEAD(L) 1
V.HEAD(L) 2
G N D 3
G N D 4
V.HEAD(R) 5
V.HEAD(R) 6
PY01
1 WHT
2 RED
3 GRY
4 ORG
5 RED
6 WHT
VIDEO HEAD (L)
VIDEO HEAD (R)
R121 820
L104 1u
L105 1u
R122 820
R153 5KB
C126 10u (16V)
C121 33P
C122 33P
C134 47u (10u)
C133 0.01u
R131 2.2K
L113 33u
C136 22P
R152 5KB
C125 10u (16V)
C124 0.01u
C123 0.01u
C129 430P
L111 150u
L106 100u
L107 100u
L110 39u
R128 560
R125 560
Q108 KTC1815-Y
C130 5P
C132 0.01u
Q107 KTC1815-Y
R127 390
L109 4.7u
R126 1K
C128 180P
R130 2.2K
C131 18P
R124 10K
C135 0.47u (50V)
R123 1K
L108 47u
C127 33P
U201
P201
YEL 1
RED 2
WHT 3
GRY(G) 4
BLU(G) 5
WHT 6
P103
1 SW PULSE
2 E REC 5V
3 PB-C
4 G N D
5 G N D
6 PB-Y
BIAS
AMP
AMP
BIAS
V reg
PG AMP
HEAD SW
CHROMA AMP
AGC DET
PEAKING AMP
7 6 5 4 3 2 1
8 9 10 11 12 13 14
IC101 AN3313K

SINCE THE CIRCUIT DIAGRAM IS A STANDARD ONE, THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

REMOTE CONTROL TRANSMISSION CIRCUIT


K8
K15
K31
K2
K6
K1
K5
K9
K13
DT03
FS
Ko0
Ko1
Ko2
Ko3
Ko4
Ko5
Ko6
Ko7
LMP
IT01
BU3703F
Ki0
Ki1
Ki2
Ki3
REM
VDD
TEST
OSC
OSC
VSS
ZT01
(455 KHZ)
CT01
100P
CT02
100P
RT02
560 Ω
DT01
GL-522
DT02
GL-522
CT03
47uF
(10V)
3V
QT01
2SC2710-Y
RT01
2.0
K1 : CH UP
K2 : CH DOWN
K5 : PLAY
K6 : FF
K8 : REW
K9 : POWER
K13 : STOP
K15 : PAUSE
K31 : RECORD

UX02 LOGIC CONTROL CIRCUIT


RL04 RL06 RL05 RL09 RL07 RL03 (200X6)
RL01 10K
SL09 (POWER ON/OFF SW)
RL10 10K
DL01 (CSTIN)
DL02 (F F)
DL03 (PLAY)
DL04 (REC)
DL05 (PAUSE)
DL06 (REW)
RL02 200
DL08 (POWER)
TPL01
TPL02
SL03 (F F)
SL02 (REW)
SL06 (PAUSE/ STILL)
SL01 (STOP)
SL04 (EJECT)
SL05 (PLAY)
SL07 (REC)
SL08 (OTR)
DL11
DL10
DL14
DL09
DL12
DL13
DL15
PL01
REW (L) 1
PAUSE (L) 2
REC (L) 3
PLAY (L) 4
F F (L) 5
CASSETTE IN 6
O T R 7
U501
P608
1 BLU
2 YEL
3 RED
4 PNK
5 ORG
6 WHT
7 GRN
UX01 TIMER CIRCUIT
PL02
SCAN 1 1
SCAN 2 2
SCAN 3 3
SCAN 4 4
O T R 5
P 01 6
P 02 7
P 03 8
U501
P610
1 BLU
2 PNK
3 ORG
4 WHT
U501
P 615
4 GRN
3 YEL
2 RED
1 BRN
UX01 TIMER CIRCUIT
PL03
POWER ON/OFF 1
+5V 2
G N D 3
REG 5V 4
U501
P611
1 BLU
2 WHT
3 BLK
4 RED

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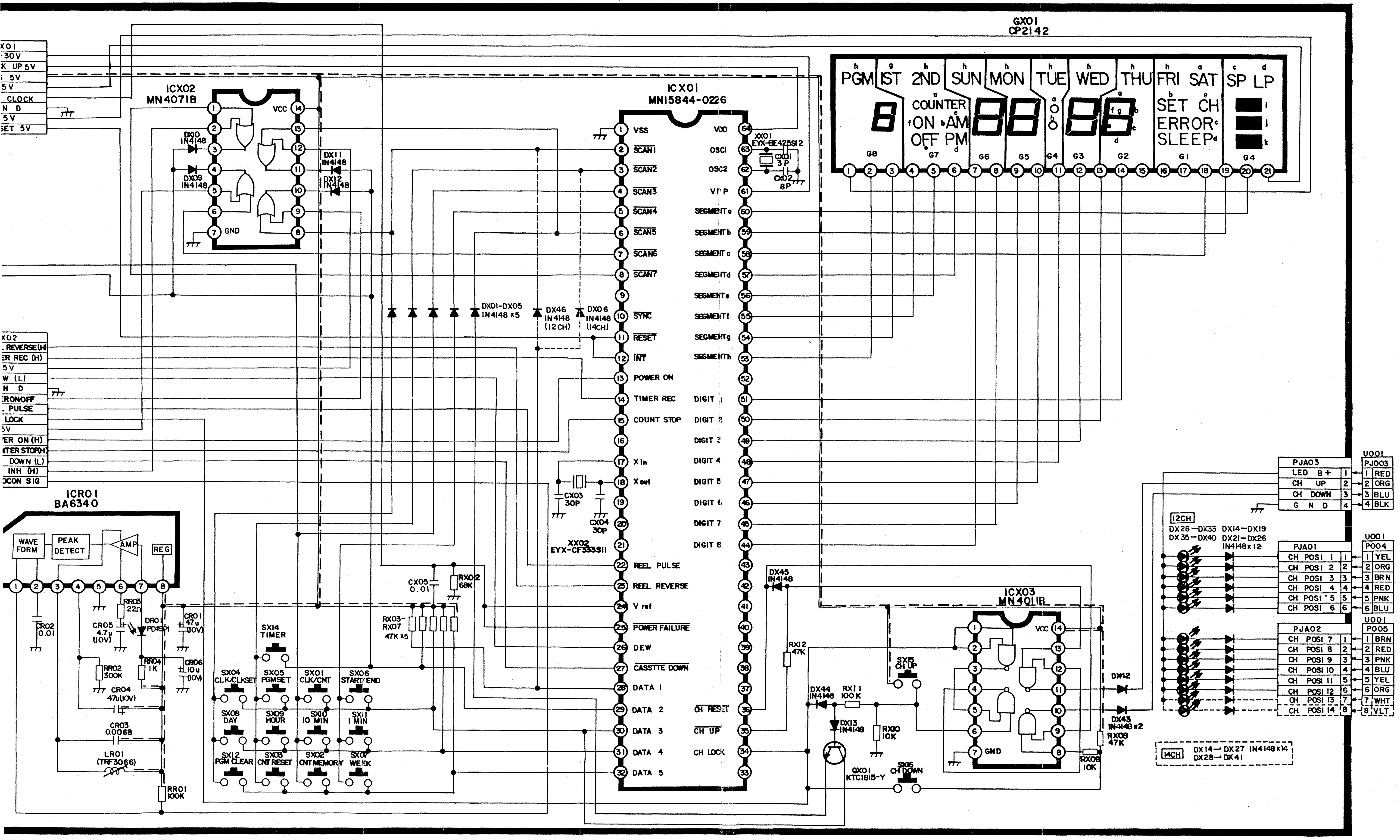
01 TIMER CIRCUIT


GX01
CP2142
PGM IST 2ND SUN MON TUE WED THU FRI SAT SP LP
COUNTER ON AM OFF PM
SET CH ERROR SLEEP
G8 G7 G6 G5 G4 G3 G2 G1 G4
ICX02
MN4071B
VCC
GND
DX10 IN4148
DX09 IN4148
DX11 IN4148
DX12 IN4148
ICX01
MN15844-0226
VSS
SCAN1
SCAN2
SCAN3
SCAN4
SCAN5
SCAN6
SCAN7
SYNC
RESET
INT
POWER ON
TIMER REC
COUNT STOP
Xin
Xout
REEL PULSE
REEL REVERSE
V ref
POWER FAILURE
DEW
CASSTTE DOWN
DATA 1
DATA 2
DATA 3
DATA 4
DATA 5
VDD
OSC1
OSC2
VPP
SEGMENT a
SEGMENT b
SEGMENT c
SEGMENT d
SEGMENT e
SEGMENT f
SEGMENT g
SEGMENT h
DIGIT 1
DIGIT 2
DIGIT 3
DIGIT 4
DIGIT 5
DIGIT 6
DIGIT 7
DIGIT 8
CH RESET
CH UP
CH LOCK
XX01
EYX-BE425S12
CX01 3P
CX02 8P
DX01-DX05 IN4148 x5
DX46 IN4148 (12CH)
DX06 IN4148 (14CH)
CX03 30P
CX04 30P
XX02
EYX-CF333S11
ICR01
BA6340
WAVE FORM
PEAK DETECT
AMP
REG
CR02 0.01
RR03 22Ω
CR05 4.7u (10V)
DR01 PD49PI
CR01 47u (10V)
RR02 300K
RR04 1K
CR06 10u (10V)
CR04 47u(10V)
CR03 0.0068
LR01 (TRF3066)
RR01 100K
CX05 0.01
RX012 68K
RX03-RX07 47K x5
SX14 TIMER
SX04 CLK/CLKSET
SX05 PGMSET
SX01 CLK/CNT
SX06 START/END
SX08 DAY
SX09 HOUR
SX10 10 MIN
SX11 1 MIN
SX12 PGM CLEAR
SX03 CNT RESET
SX02 CNT MEMORY
SX07 WEEK
DX45 IN4148
RX12 47K
DX44 IN4148
RX11 100K
DX13 IN4148
RX10 10K
QX01 KTC1815-Y
SX15 CH UP
SX16 CH DOWN
ICX03
MN4011B
VCC
GND
DX42
DX43
IN4148 x2
RX08 47K
RX09 10K
14CH DX14→DX27 IN4148x14
DX28→DX41
12CH
DX28-DX33 DX14-DX19
DX35-DX40 DX21-DX26
IN4148x12
X01
-30V
K UP 5V
5V
5V
CLOCK
N D
5V
SET 5V
X02
REVERSE(H)
ER REC (H)
5V
W (L)
N D
ERONOFF
PULSE
LOCK
5V
ER ON (H)
NTER STOP(H)
DOWN (L)
INH (H)
CON SIG
PJA03
LED B+
CH UP
CH DOWN
G N D
U001
PJ003
RED
ORG
BLU
BLK
PJA01
CH POSI 1
CH POSI 2
CH POSI 3
CH POSI 4
CH POSI 5
CH POSI 6
P004
YEL
ORG
BRN
RED
PNK
BLU
PJA02
CH POSI 7
CH POSI 8
CH POSI 9
CH POSI 10
CH POSI 11
CH POSI 12
CH POSI 13
CH POSI 14
P005
BRN
RED
PNK
BLU
YEL
ORG
WHT
VLT

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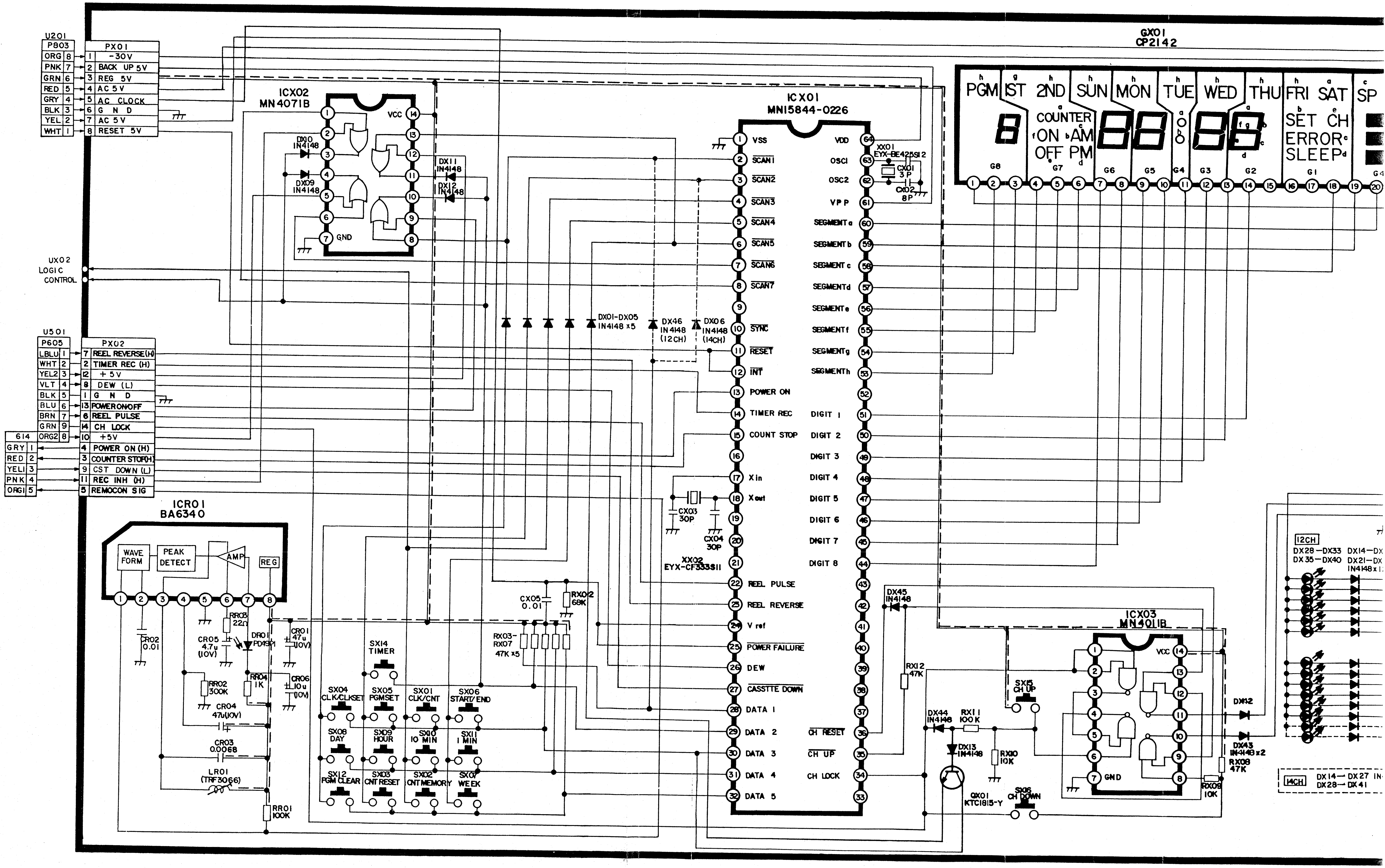
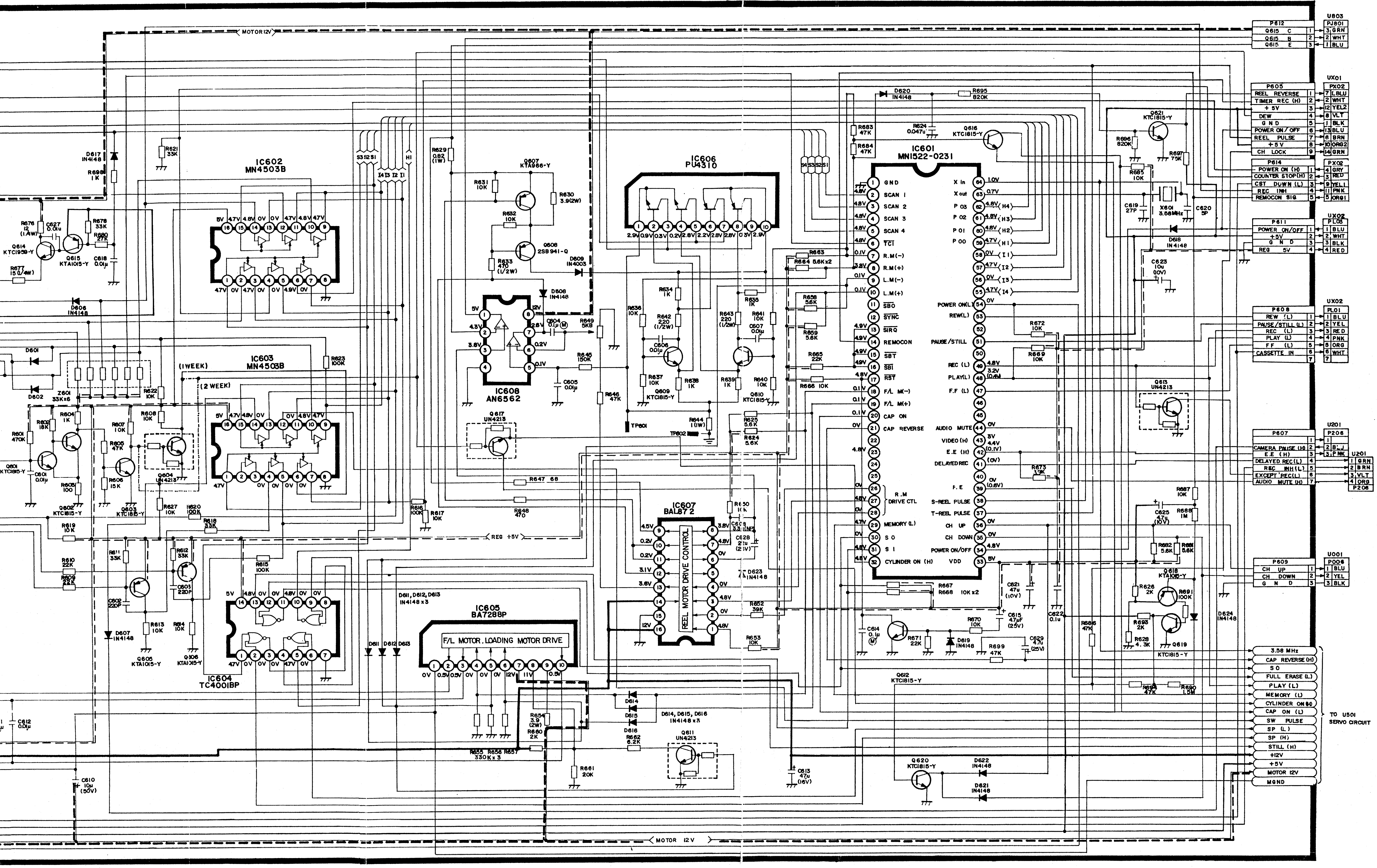
UX01 TIMER CIRCUIT


U201
P803
PX01
ORG 8
PNK 7
GRN 6
RED 5
GRY 4
BLK 3
YEL 2
WHT 1
-30V
BACK UP 5V
REG 5V
AC 5V
AC CLOCK
G N D
AC 5V
RESET 5V
ICX02
MN4071B
VCC
GND
DX10 1N4148
DX09 1N4148
DX11 1N4148
DX12 1N4148
UX02 LOGIC CONTROL
U501
P605
PX02
LBLU 1
WHT 2
YEL2 3
VLT 4
BLK 5
BLU 6
BRN 7
GRN 9
ORG2 8
614
GRY 1
RED 2
YEL1 3
PNK 4
ORG1 5
REEL REVERSE(H)
TIMER REC (H)
+5V
DEW (L)
G N D
POWER ON/OFF
REEL PULSE
CH LOCK
+5V
POWER ON (H)
COUNTER STOP(H)
CST DOWN (L)
REC INH (H)
REMOCON SIG
ICR01
BA6340
WAVE FORM
PEAK DETECT
AMP
REG
CR02 0.01
RR03 22Ω
CR05 4.7u (10V)
DR01 PD49PI
CR01 47u (10V)
RR04 1K
CR06 10u (10V)
RR02 300K
CR04 47u(10V)
CR03 0.0068
LR01 (TRF3066)
RR01 100K
SX14 TIMER
SX04 CLK/CLKSET
SX05 PGMSET
SX01 CLK/CNT
SX06 START/END
SX08 DAY
SX09 HOUR
SX10 10 MIN
SX11 1 MIN
SX12 PGM CLEAR
SX03 CNT RESET
SX02 CNT MEMORY
SX07 WEEK
CX05 0.01
RX02 68K
RX03-RX07 47K x5
DX01-DX05 1N4148 x5
DX46 1N4148 (12CH)
DX06 1N4148 (14CH)
ICX01
MN15844-0226
VSS
SCAN1
SCAN2
SCAN3
SCAN4
SCAN5
SCAN6
SCAN7
SYNC
RESET
INT
POWER ON
TIMER REC
COUNT STOP
Xin
Xout
REEL PULSE
REEL REVERSE
V ref
POWER FAILURE
DEW
CASSTTE DOWN
DATA 1
DATA 2
DATA 3
DATA 4
DATA 5
VDD
OSC1
OSC2
VPP
SEGMENT a
SEGMENT b
SEGMENT c
SEGMENT d
SEGMENT e
SEGMENT f
SEGMENT g
SEGMENT h
DIGIT 1
DIGIT 2
DIGIT 3
DIGIT 4
DIGIT 5
DIGIT 6
DIGIT 7
DIGIT 8
CH RESET
CH UP
CH LOCK
XX01 EYX-BE4255I2
CX01 3P
CX02 8P
CX03 30P
CX04 30P
XX02 EYX-CF3335II
GX01
CP2142
PGM
1ST
2ND
SUN
MON
TUE
WED
THU
FRI
SAT
SP
COUNTER
ON
AM
OFF
PM
SET
CH
ERROR
SLEEP
G8
G7
G6
G5
G4
G3
G2
G1
DX45 1N4148
RX12 47K
DX44 1N4148
RX11 100K
DX13 1N4148
RX10 10K
QX01 KTC1815-Y
SX15 CH UP
SX16 CH DOWN
ICX03
MN4011B
VCC
GND
DX42
DX43 1N4148 x2
RX08 47K
RX09 10K
12CH
DX28-DX33 DX14-DX
DX35-DX40 DX21-DX
1N4148 x
14CH
DX14-DX27 IN
DX28-DX41

SINCE THE CIRCUIT DIAGRAM
THE CIRCUIT AND CIRCUIT CO
SUBJECT TO CHANGE FOR I
ANY NOTICE.

RCUIT

V : Recording mode
(V) : Playback mode



IC601 MN1522-0231
IC602 MN4503B
IC603 MN4503B
IC604 TC4001BP
IC605 BA7288P
F/L MOTOR . LOADING MOTOR DRIVE
IC606 PU4310
IC607 BAL872
REEL MOTOR DRIVE CONTROL
IC608 AN6562
MOTOR 12V
REG +5V
(1 WEEK)
(2 WEEK)
GND
SCAN 1
SCAN 2
SCAN 3
SCAN 4
TCI
R.M(-)
R.M(+)
L.M(-)
L.M(+)
SBO
SYNC
SIRQ
REMOCON
SBT
SBI
RST
F/L M(-)
F/L M(+)
CAP ON
CAP REVERSE
R.M DRIVE CTL
MEMORY (L)
S O
S I
CYLINDER ON (H)
X in
X out
P 03
P 02
P 01
P 00
POWER ON(L)
REW(L)
PAUSE/STILL
REC (L)
PLAY(L)
F.F (L)
AUDIO MUTE
VIDEO (H)
E.E (H)
DELAYED REC
F.E
S-REEL PULSE
T-REEL PULSE
CH UP
CH DOWN
POWER ON/OFF
VDD
X601 3.58MHz
U803
P612
Q615 C
Q615 B
Q615 E
PJ801
GRN
WHT
BLU
UX01
P605
PX02
REEL REVERSE
TIMER REC (H)
+5V
DEW
GND
POWER ON/OFF
REEL PULSE
+5V
CH LOCK
P614
POWER ON (H)
COUNTER STOP(H)
CST DOWN (L)
REC INH
REMOCON SIG
UX02
P611
PL02
POWER ON/OFF
+5V
GND
REG 5V
UX02
P606
PL01
REW (L)
PAUSE/STILL (L)
REC (L)
PLAY (L)
FF (L)
CASSETTE IN
U201
P607
P206
CAMERA PAUSE (H)
E.E (H)
DELAYED REC(L)
REC INH(L)
EXCEPT REC(L)
AUDIO MUTE (H)
U001
P609
P006
CH UP
CH DOWN
GND
3.58 MHz
CAP REVERSE(H)
SO
FULL ERASE (L)
PLAY (L)
MEMORY (L)
CYLINDER ON(H)
CAP ON (L)
SW PULSE
SP (L)
SP (H)
STILL (H)
+12V
+5V
MOTOR 12V
MGND
TO U501 SERVO CIRCUIT
Q601 KTC1815-Y
Q602 KTC1815-Y
Q603 KTC1815-Y
Q604 UN4213
Q605 KTA1015-Y
Q606 KTA1015-Y
Q607 KTA966-Y
Q608 2SB941-Q
Q609 KTC1815-Y
Q610 KTC1815-Y
Q611 UN4213
Q612 KTC1815-Y
Q613 UN4213
Q614 KTC1959-Y
Q615 KTA1015-Y
Q616 KTC1815-Y
Q617 UN4213
Q618 KTA1015-Y
Q619 KTC1815-Y
Q620 KTC1815-Y
Q621 KTC1815-Y
D601
D602
D606 IN4148
D607 IN4148
D608 IN4148
D609 IN4003
D611, D612, D613 IN4148 x3
D614, D615, D616 IN4148 x3
D617 IN4148
D618 IN4148
D619 IN4148
D620 IN4148
D621 IN4148
D622 IN4148
D623 IN4148
D624 IN4148
Z601 33K x6
TP601
TP602
R655 R656 R657 330K x 3
R664 5.6K x2
R667 R668 10K x2

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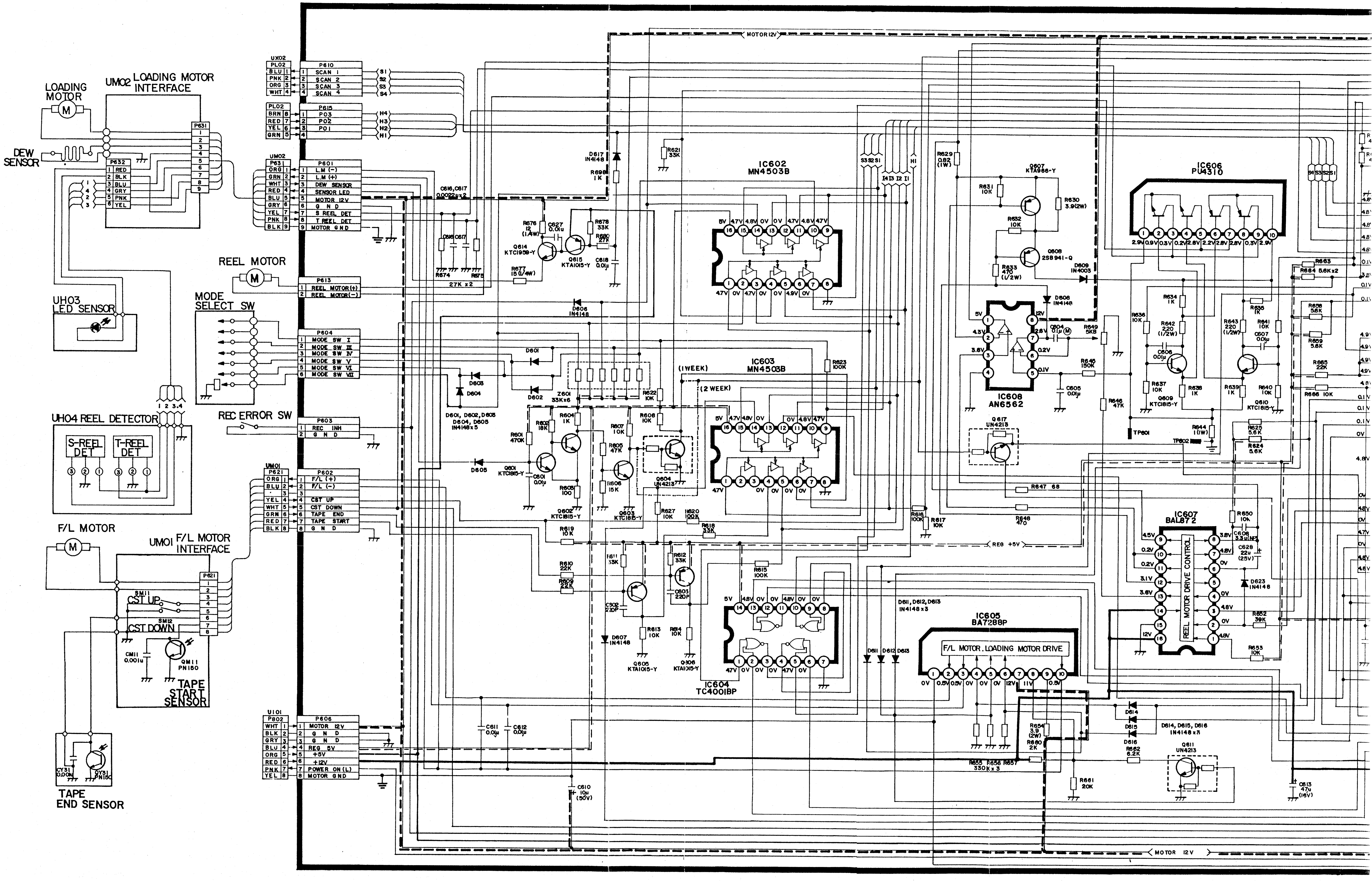
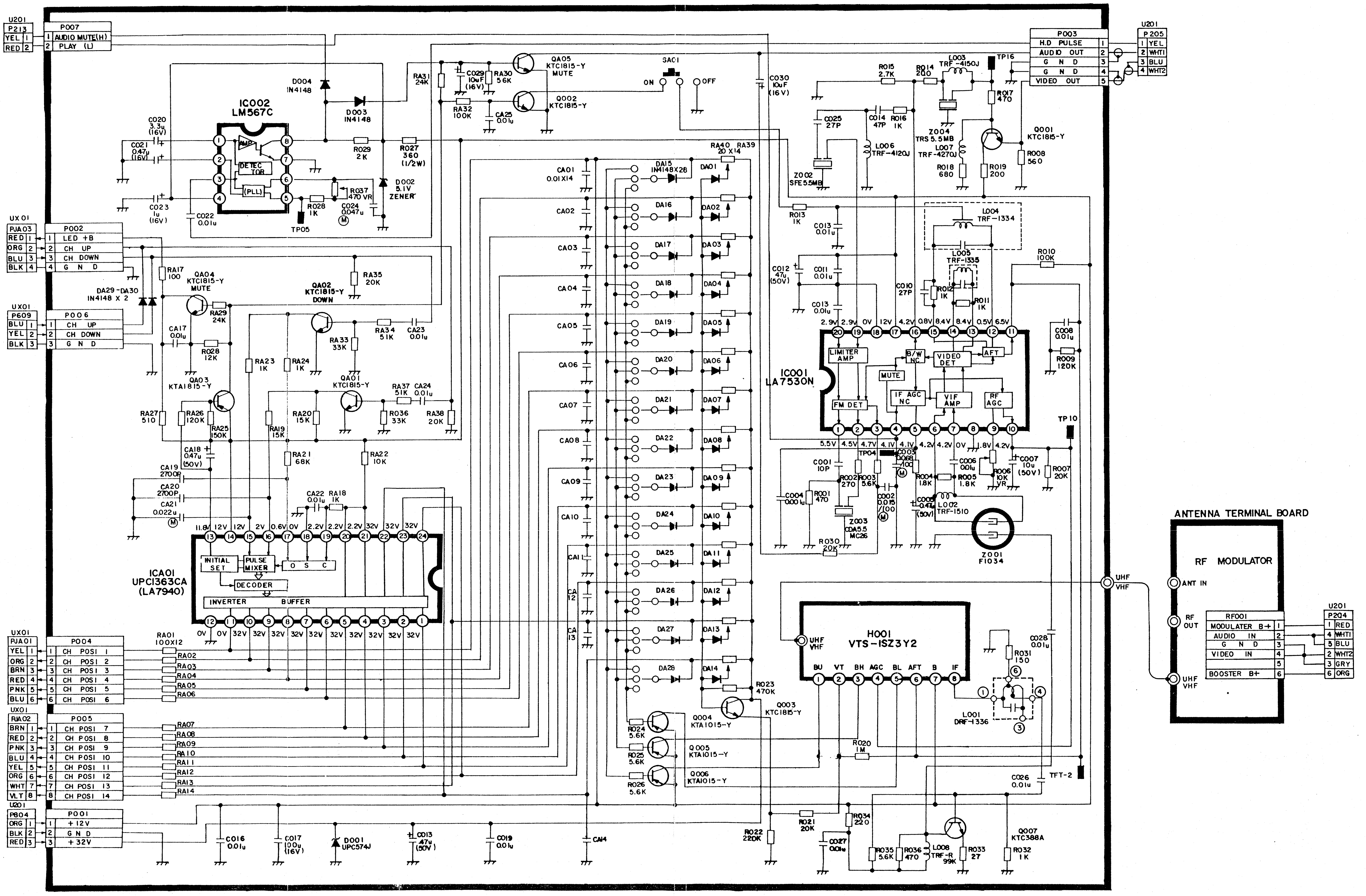
U501 LOGIC CIRCUIT

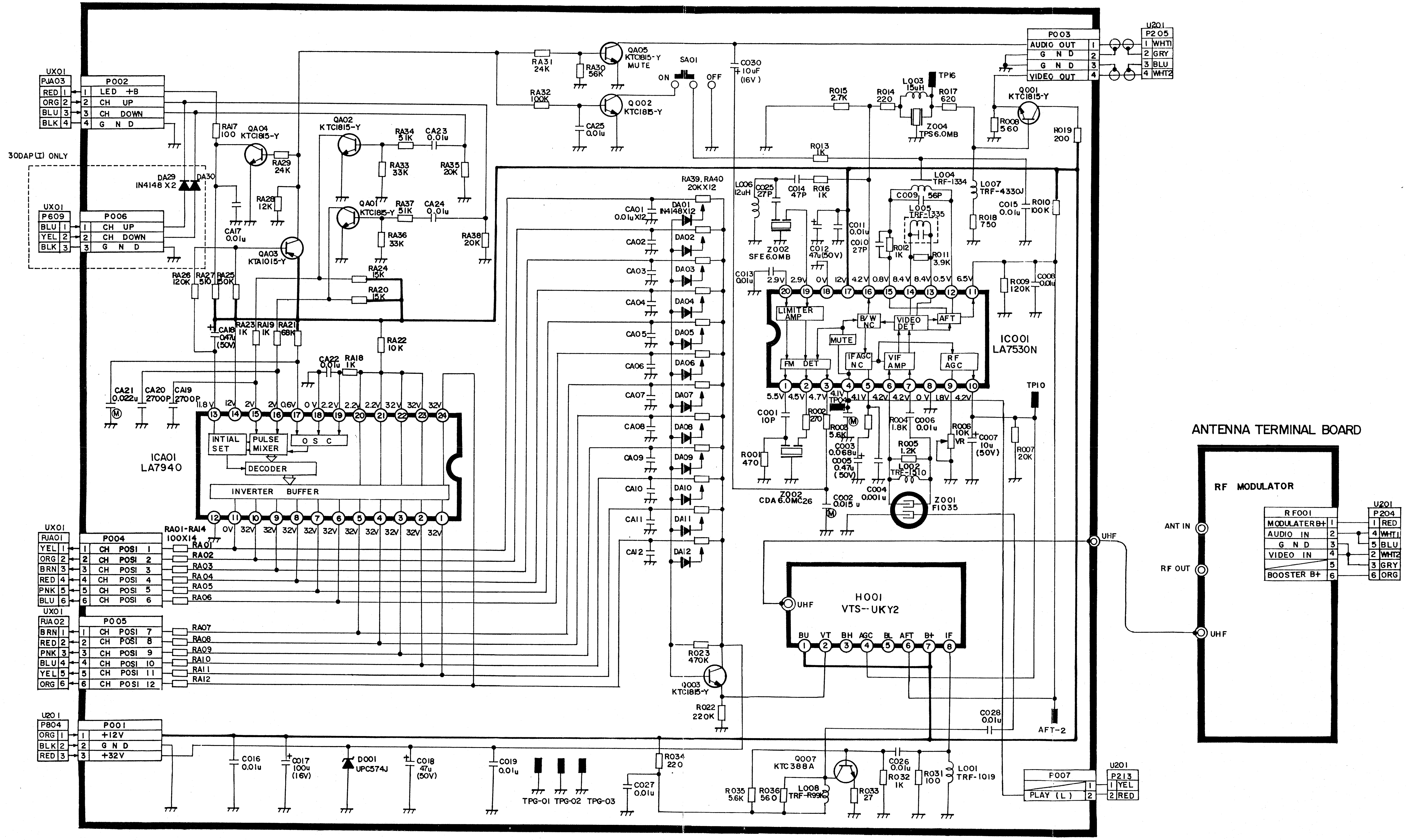


LOADING MOTOR
UM02 LOADING MOTOR INTERFACE
DEW SENSOR
P631
P632
UH03 LED SENSOR
UH04 REEL DETECTOR
S-REEL DET
T-REEL DET
F/L MOTOR
UM01 F/L MOTOR INTERFACE
P621
SM11 CST UP
SM12 CST DOWN
CM11 0.001μ
QM11 PN150
TAPE START SENSOR
CY31 0.001μ
QY31 PN150
TAPE END SENSOR
UX02
PL02
P610
SCAN 1
SCAN 2
SCAN 3
SCAN 4
P615
PO3
PO2
PO1
UM02
P63
P601
L.M (−)
L.M (+)
DEW SENSOR
SENSOR LED
MOTOR 12V
G N D
S REEL DET
T REEL DET
MOTOR GND
REEL MOTOR
P613
REEL MOTOR (+)
REEL MOTOR (−)
MODE SELECT SW
P604
MODE SW I
MODE SW III
MODE SW IV
MODE SW V
MODE SW VI
MODE SW VII
REC ERROR SW
P603
REC INH
G N D
UM01
P621
P602
F/L (+)
F/L (−)
CST UP
CST DOWN
TAPE END
TAPE START
G N D
U101
P802
P606
MOTOR 12V
G N D
G N D
REG 5V
+5V
+12V
POWER ON (L)
MOTOR GND
MOTOR 12V
REG +5V
IC602 MN4503B
IC603 MN4503B
(1 WEEK)
(2 WEEK)
IC604 TC4001BP
IC605 BA7288P
F/L MOTOR . LOADING MOTOR DRIVE
IC606 PU4310
IC607 BAL872
REEL MOTOR DRIVE CONTROL
IC608 AN6562
Q601 KTC1815-Y
Q602 KTC1815-Y
Q603 KTC1815-Y
Q604 UN4213
Q605 KTA1015-Y
Q606 KTA1015-Y
Q607 KTA966-Y
Q608 2SB941-Q
Q609 KTC1815-Y
Q610 KTC1815-Y
Q611 UN4213
Q614 KTC1959-Y
Q615 KTA1015-Y
Q617 UN4213
D601, D602, D603, D604, D605 1N4148 x 5
D606 1N4148
D607 1N4148
D608 1N4148
D609 1N4003
D611, D612, D613 1N4148 x 3
D614, D615, D616 1N4148 x 3
D617 1N4148
D623 1N4148
Z601 33K x 6
R674 R675 27K x 2
R676 12 (1/4W)
R677 15 (1/4W)
R678 33K
R680 27K
R698 1K
R621 33K
R622 10K
R623 100K
R629 0.82 (1W)
R631 10K
R632 10K
R630 3.9 (2W)
R633 470 (1/2W)
R649 5KB
R645 150K
R646 47K
R644 1 (1W)
R647 68
R648 470
R601 470K
R602 18K
R603 100
R604 1K
R605 47K
R606 15K
R607 10K
R608 10K
R609 22K
R610 22K
R611 13K
R612 33K
R613 10K
R614 10K
R615 100K
R616 100K
R617 10K
R618 33K
R619 10K
R620 100K
R627 10K
R650 10K
R652 39K
R653 10K
R654 3.9 (2W)
R655 R656 R657 330K x 3
R660 2K
R661 20K
R662 6.2K
R663
R664 5.6K x 2
R665 22K
R666 10K
R624 5.6K
R625 5.6K
R634 1K
R635 1K
R636 10K
R637 10K
R638 1K
R639 1K
R640 10K
R641 10K
R642 220 (1/2W)
R643 220 (1/2W)
R658 5.6K
R659 5.6K
C601 0.01μ
C602 220P
C603 220P
C604 0.1μ (M)
C605 0.01μ
C606 0.01μ
C607 0.01μ
C608 3.3μ (NP)
C610 10μ (50V)
C611 0.01μ
C612 0.01μ
C613 47μ (16V)
C616, C617 0.0022μ x 2
C618 0.01μ
C626 22μ (25V)
C627 0.01μ
TP601
TP602

U001 PIF SELECTOR CIRCUIT (50DAP GAB, 30DAP GBA)


U201
P213
YEL 1
RED 2
P007
1 AUDIO MUTE(H)
2 PLAY (L)
IC002
LM567C
AMP
DETEC TOR
(PLL)
D004 IN4148
D003 IN4148
D002 5.1V ZENER
R029 2K
R027 360 (1/2W)
R028 1K
R037 470 VR
C024 0.047u
TP05
C020 3.3u (16V)
C021 0.47u (16V)
C022 0.01u
C023 1u (16V)
RA31 24K
C029 10uF (16V)
RA30 5.6K
RA32 100K
CA25 0.01u
QA05 KTC1815-Y MUTE
Q002 KTC1815-Y
SAC1
ON
OFF
C030 10uF (16V)
UX01
PJA03
RED 1
ORG 2
BLU 3
BLK 4
P002
1 LED +B
2 CH UP
3 CH DOWN
4 G N D
RA17 100
QA04 KTC1815-Y MUTE
DA29-DA30 IN4148 X 2
RA29 24K
QA02 KTC1815-Y DOWN
RA35 20K
RA34 51K
CA23 0.01u
RA33 33K
P609
BLU 1
YEL 2
BLK 3
P006
1 CH UP
2 CH DOWN
3 G N D
CA17 0.01u
RA28 12K
QA03 KTA1815-Y
RA23 1K
RA24 1K
QA01 KTC1815-Y
RA37 51K
CA24 0.01u
RA27 510
RA26 120K
RA25 150K
RA19 15K
RA20 15K
RA36 33K
RA38 20K
CA18 0.47u (50V)
CA19 2700P
CA20 2700P
CA21 0.022u
RA21 68K
RA22 10K
CA22 0.01u
RA18 1K
ICA01
UPC1363CA
(LA7940)
INITIAL SET
PULSE MIXER
O S C
DECODER
INVERTER BUFFER
11.8V 12V 12V 2V 0.6V 0V 2.2V 2.2V 2.2V 32V 32V 32V
0V 0V 32V 32V 32V 32V 32V 32V 32V 32V 32V 32V
P004
1 CH POSI 1
2 CH POSI 2
3 CH POSI 3
4 CH POSI 4
5 CH POSI 5
6 CH POSI 6
PJA01
YEL 1
ORG 2
BRN 3
RED 4
PNK 5
BLU 6
RA01 100X12
RA02
RA03
RA04
RA05
RA06
RJA02
P005
1 CH POSI 7
2 CH POSI 8
3 CH POSI 9
4 CH POSI 10
5 CH POSI 11
6 CH POSI 12
7 CH POSI 13
8 CH POSI 14
BRN 1
RED 2
PNK 3
BLU 4
YEL 5
ORG 6
WHT 7
VLT 8
RA07
RA08
RA09
RA10
RA11
RA12
RA13
RA14
P804
ORG 1
BLK 2
RED 3
P001
1 +12V
2 G N D
3 +32V
C016 0.01u
C017 100u (16V)
D001 UPC574J
C013 47u (50V)
C019 0.01u
CA14
CA01 0.01X14
CA02
CA03
CA04
CA05
CA06
CA07
CA08
CA09
CA10
CA11
CA12
CA13
DA15 IN4148X28
DA16
DA17
DA18
DA19
DA20
DA21
DA22
DA23
DA24
DA25
DA26
DA27
DA28
RA40 RA39 20 X14
DA01
DA02
DA03
DA04
DA05
DA06
DA07
DA08
DA09
DA10
DA11
DA12
DA13
DA14
R023 470K
Q003 KTC1815-Y
Q004 KTA1015-Y
Q005 KTA1015-Y
Q006 KTA1015-Y
R024 5.6K
R025 5.6K
R026 5.6K
R022 220K
R021 20K
R020 1M
R034 220
C027 0.01u
R035 5.6K
R036 470
L008 TRF-R 99K
R033 27
Q007 KTC388A
R032 1K
C026 0.01u
TFT-2
C028 0.01u
R031 150
L001 DRF-1336
H001 VTS-ISZ3Y2
UHF VHF
BU VT BH AGC BL AFT B IF
P003
1 H.D PULSE
2 AUDIO OUT
3 G N D
4 G N D
5 VIDEO OUT
U201
P205
1 YEL
2 WHT1
3 BLU
4 WHT2
TP16
R015 2.7K
R014 200
L003 TRF-4150J
R017 470
Z004 TRS 5.5MB
Q001 KTC1815-Y
R008 560
C025 27P
C014 47P
R016 1K
L006 TRF-4120J
L007 TRF-4270J
R018 680
R019 200
Z002 SFE5.5MB
R013 1K
C013 0.01u
L004 TRF-1334
L005 TRF-1335
R012 1K
R011 1K
R010 100K
C012 47u (50V)
C011 0.01u
C013 0.01u
C010 27P
2.9V 2.9V 0V 12V 4.2V 0.8V 8.4V 8.4V 0.5V 6.5V
IC001
LA7530N
LIMITER AMP
B/W NC
VIDEO DET
AFT
MUTE
FM DET
IF AGC NC
VIF AMP
RF AGC
C008 0.01u
R009 120K
TP10
5.5V 4.5V 4.7V 4.1V 4.1V 4.2V 4.2V 0V 1.8V 4.2V
TP04
C001 10P
C003 0.068 /100
C004 0.001u
R001 470
R002 270
R003 5.6K
C002 0.015 /100
Z003 CDA5.5 MC26
R030 20K
R004 1.8K
R005 1.8K
R006 10K VR
C006 0.01u
C005 0.47u (50V)
L002 TRF-1510
C007 10u (50V)
R007 20K
Z001 F1034
UHF VHF
ANTENNA TERMINAL BOARD
RF MODULATOR
ANT IN
RF OUT
UHF VHF
RF001
1 MODULATER B+
2 AUDIO IN
3 G N D
4 VIDEO IN
5
6 BOOSTER B+
U201
P204
1 RED
4 WHT1
5 BLU
2 WHT2
3 GRY
6 ORG

U001 PIF SELECTOR CIRCUIT (30DAP(I), 30NAP)



UX01
PJA03
P002
RED 1 LED +B
ORG 2 CH UP
BLU 3 CH DOWN
BLK 4 G N D
30DAP(I) ONLY
UX01
P609
P006
BLU 1 CH UP
YEL 2 CH DOWN
BLK 3 G N D
DA29 1N4148 X2
DA30
RA17 100
QA04 KTC1815-Y
RA29 24K
RA28 12K
CA17 0.01u
QA03 KTA1015-Y
QA02 KTC1815-Y
RA34 51K
CA23 0.01u
RA33 33K
RA35 20K
QA01 KTC1815-Y
RA37 51K
CA24 0.01u
RA36 33K
RA38 20K
RA24 15K
RA20 15K
RA26 120K
RA27 510
RA25 150K
CA18 0.47u (50V)
RA23 1K
RA19 1K
RA21 68K
RA22 10K
CA22 0.01u
RA18 1K
CA21 0.022u
CA20 2700P
CA19 2700P
ICA01 LA7940
INTIAL SET
PULSE MIXER
O S C
DECODER
INVERTER BUFFER
RA31 24K
RA30 56K
QA05 KTC1815-Y MUTE
RA32 100K
Q002 KTC1815-Y
CA25 0.01u
SA01
ON
OFF
C030 10uF (16V)
RA39, RA40 20KX12
CA01 0.01uX12
DA01 1N4148X12
DA02 DA03 DA04 DA05 DA06 DA07 DA08 DA09 DA10 DA11 DA12
CA02 CA03 CA04 CA05 CA06 CA07 CA08 CA09 CA10 CA11 CA12
UX01
PJA01
P004
RA01-RA14 100X14
YEL 1 CH POSI 1
ORG 2 CH POSI 2
BRN 3 CH POSI 3
RED 4 CH POSI 4
PNK 5 CH POSI 5
BLU 6 CH POSI 6
PJA02
P005
BRN 1 CH POSI 7
RED 2 CH POSI 8
PNK 3 CH POSI 9
BLU 4 CH POSI 10
YEL 5 CH POSI 11
ORG 6 CH POSI 12
RA01 RA02 RA03 RA04 RA05 RA06 RA07 RA08 RA09 RA10 RA11 RA12
U201
P804
P001
ORG 1 +12V
BLK 2 G N D
RED 3 +32V
C016 0.01u
C017 100u (16V)
D001 UPC574J
C018 47u (50V)
C019 0.01u
TPG-01 TPG-02 TPG-03
R034 220
C027 0.01u
R023 470K
Q003 KTC1815-Y
R022 220K
R015 2.7K
R014 220
L003 15uH
TP16
R017 620
Z004 TPS6.0MB
R013 1K
L006 12uH
C025 27P
C014 47P
R016 1K
Z002 SFE6.0MB
C012 47u(50V)
C011 0.01u
C010 27P
C013 0.01u
L004 TRF-1334
C009 56P
L005 TRF-1335
R012 1K
R011 3.9K
L007 TRF-4330J
R018 750
C015 0.01u
R010 100K
R009 120K
C008 0.01u
LIMITER AMP
B/W NC
VIDEO DET
AFT
MUTE
FM DET
IF AGC NC
VIF AMP
RF AGC
IC001 LA7530N
C001 10P
R002 270
TP04
R003 5.6K
C003 0.068u
C005 0.47u (50V)
R001 470
Z002 CDA6.0MC26
C002 0.015u
C004 0.001u
R004 1.8K
C006 0.01u
R005 1.2K
L002 TRF-1510
R006 10K
VR
C007 10u (50V)
R007 20K
TP10
Z001 F1035
P003
AUDIO OUT
G N D
G N D
VIDEO OUT
U201
P205
1 WHT1
2 GRY
3 BLU
4 WHT2
Q001 KTC1815-Y
R008 560
R019 200
UHF
H001 VTS--UKY2
BU VT BH AGC BL AFT B+ IF
C028 0.01u
AFT-2
Q007 KTC388A
C026 0.01u
R032 1K
R031 100
L001 TRF-1019
R035 5.6K
R036 560
L008 TRF-R916
R033 27
P007
PLAY (L)
U201
P213
1 YEL
2 RED
ANTENNA TERMINAL BOARD
RF MODULATOR
ANT IN
RF OUT
UHF
RF001
MODULATER B+
AUDIO IN
G N D
VIDEO IN
BOOSTER B+
U201
P204
1 RED
4 WHT1
5 BLU
2 WHT2
3 GRY
6 ORG

SINCE THE CIRCUIT DIAGRAM IS A STANDARD ONE, THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

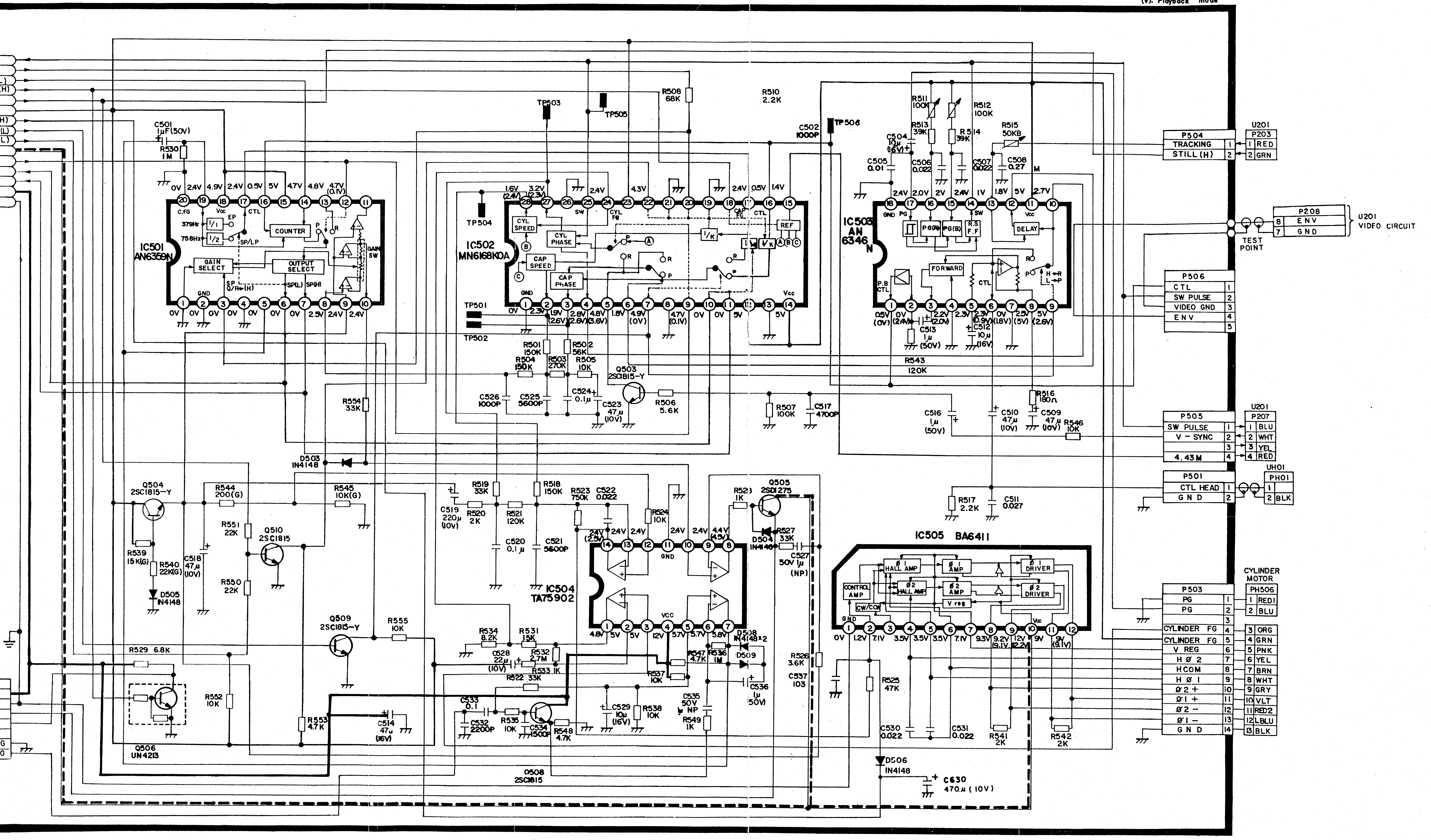
SERVO CIRCUIT

M {LP15 SP15

K (5: SEARCH

Ⓐ : 25Hz
Ⓑ : 150Hz
Ⓒ {LP:379Hz SP:758Hz

V: Recording mode
(V): Playback mode



IC501 AN6359N
C.FG
Vcc
CTL
379Hz 1/1
758Hz 1/2
EP
SP/LP
COUNTER
GAIN SELECT
OUTPUT SELECT
SP Q/Re(H)
SP(L)
SP(H)
GAIN SW
GND
C501 1μF(50V)
R530 1M
IC502 MN6168K0A
CYL SPEED
CYL PHASE
CAP SPEED
CAP PHASE
REF
1/K
SW
CYL FG
CAP FG
TP501
TP502
TP503
TP504
TP505
TP506
R508 68K
R510 2.2K
C502 1000P
R501 150K
R502 56K
R503 270K
R504 150K
R505 10K
C526 1000P
C525 5600P
C524 0.1μ
C523 47μ (10V)
Q503 2SC1815-Y
R506 5.6K
R507 100K
C517 4700P
R554 33K
D503 1N4148
IC503 AN6346N
PG
PG(A)
PG(B)
R.S F.F
DELAY
FORWARD
P.B CTL
GND
R511 100K
R512 100K
R513 39K
R514 39K
R515 50KB
C504 10μ (16V)
C505 0.01
C506 0.022
C507 0.022
C508 0.27
C513 1μ (50V)
C512 10μ (16V)
R543 120K
R516 180Ω
C516 1μ (50V)
C510 47μ (10V)
C509 47μ (10V)
R546 10K
R517 2.2K
C511 0.027
H↔R
L↔P
P504
TRACKING
STILL (H)
U201
P203
RED
GRN
P208
ENV
GND
U201 VIDEO CIRCUIT
TEST POINT
P506
CTL
SW PULSE
VIDEO GND
ENV
P505
SW PULSE
V - SYNC
4.43M
P207
BLU
WHT
YEL
RED
P501
CTL HEAD
GND
UH01
PH01
BLK
Q504 2SC1815-Y
R544 200(G)
R545 10K(G)
R551 22K
R550 22K
Q510 2SC1815
R539 15K(G)
R540 22K(G)
C518 47μ (10V)
D505 1N4148
Q509 2SC1815-Y
R555 10K
R529 6.8K
R552 10K
R553 4.7K
C514 47μ (16V)
Q506 UN4213
Q508 2SC1815
C519 220μ (10V)
R519 33K
R520 2K
R521 120K
R518 150K
R523 750K
C522 0.022
R524 10K
C520 0.1μ
C521 5600P
IC504 TA75902
VCC
R534 8.2K
R531 15K
C528 22μ (10V)
R532 2.7M
R533 1K
R522 33K
C533 0.1
C532 2200P
R535 10K
C534 1500P
R548 4.7K
C529 10μ (16V)
R538 10K
R537 10K
R547 4.7K
R536 1M
C535 50V 1μ NP
R549 1K
D508 1N4148×2
D509
C536 1μ 50V
R523 1K
Q505 2SD1275
D504 1N4148
R527 33K
C527 50V 1μ (NP)
R526 3.6K
C537 103
IC505 BA6411
CONTROL AMP
CW/CCW
φ1 HALL AMP
φ2 HALL AMP
φ1 AMP
φ2 AMP
V reg
φ1 DRIVER
φ2 DRIVER
R525 47K
C530 0.022
C531 0.022
R541 2K
R542 2K
D506 1N4148
C630 470μ (10V)
CYLINDER MOTOR
P503
PH506
PG
CYLINDER FG
V REG
H φ 2
HCOM
H φ 1
φ 2 +
φ 1 +
φ 2 −
φ 1 −
GND
RED
BLU
ORG
GRN
PNK
YEL
BRN
WHT
GRY
VLT
RED2
LBLU
BLK

SINCE THE CIRCUIT DIAGRAM IS A STANDARD ONE, THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

U501 SERVO CIRCUIT

M {LP15 SP15

K (5: SEARCH

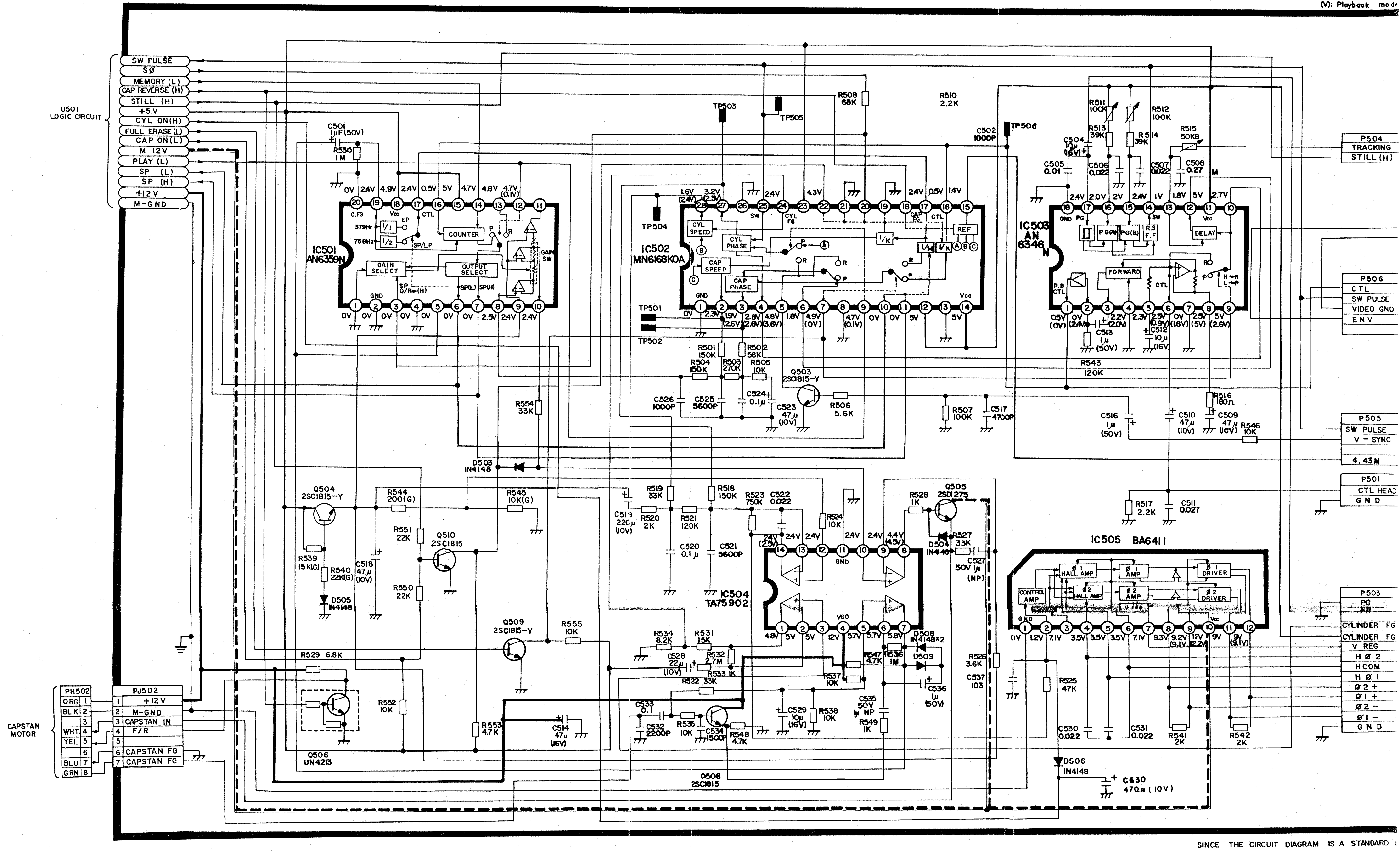
Ⓐ : 25Hz

Ⓑ : 150Hz

Ⓒ {LP:379H: SP:758Hz

V: Recording mode

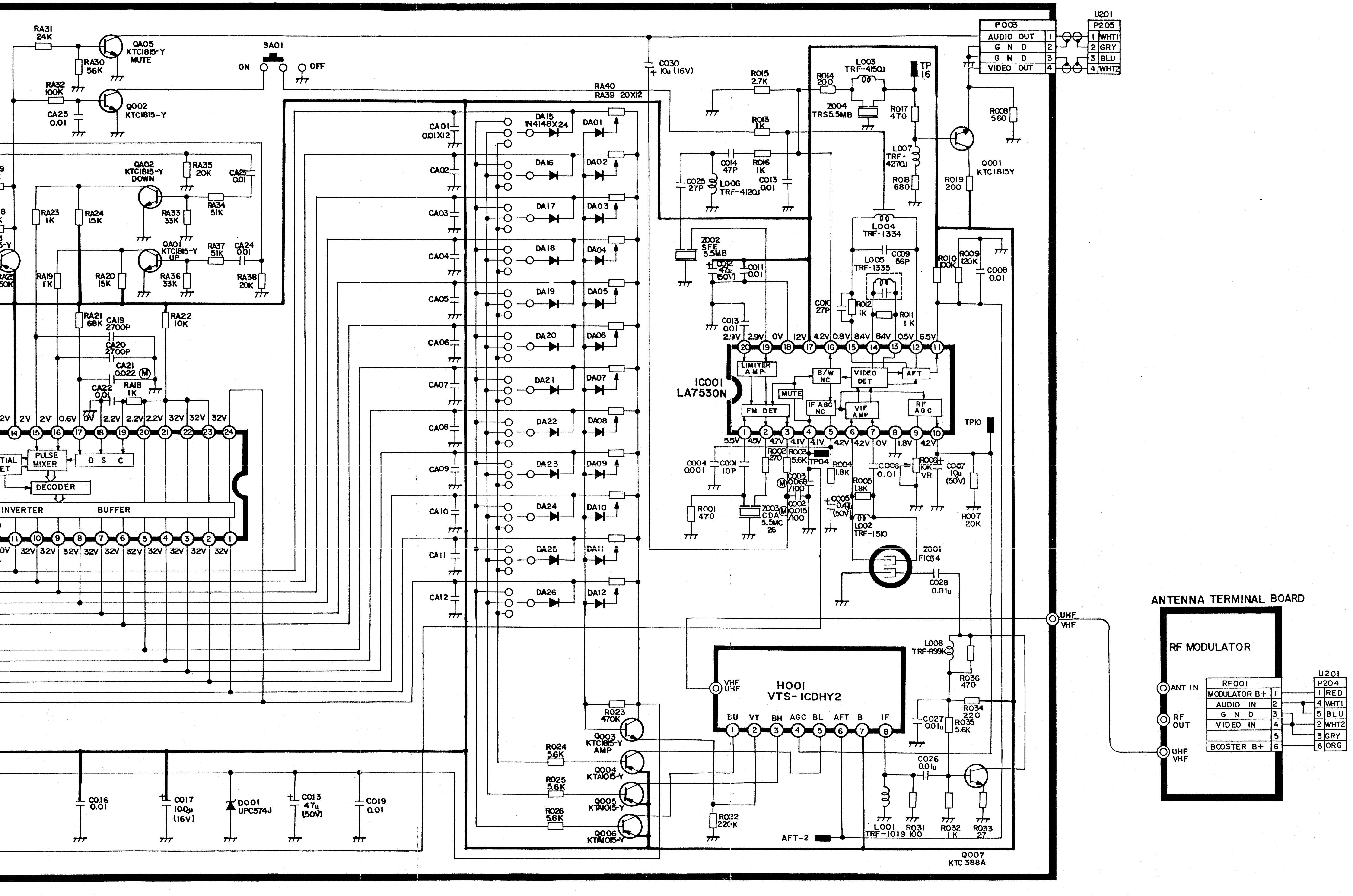
(V): Playback mode



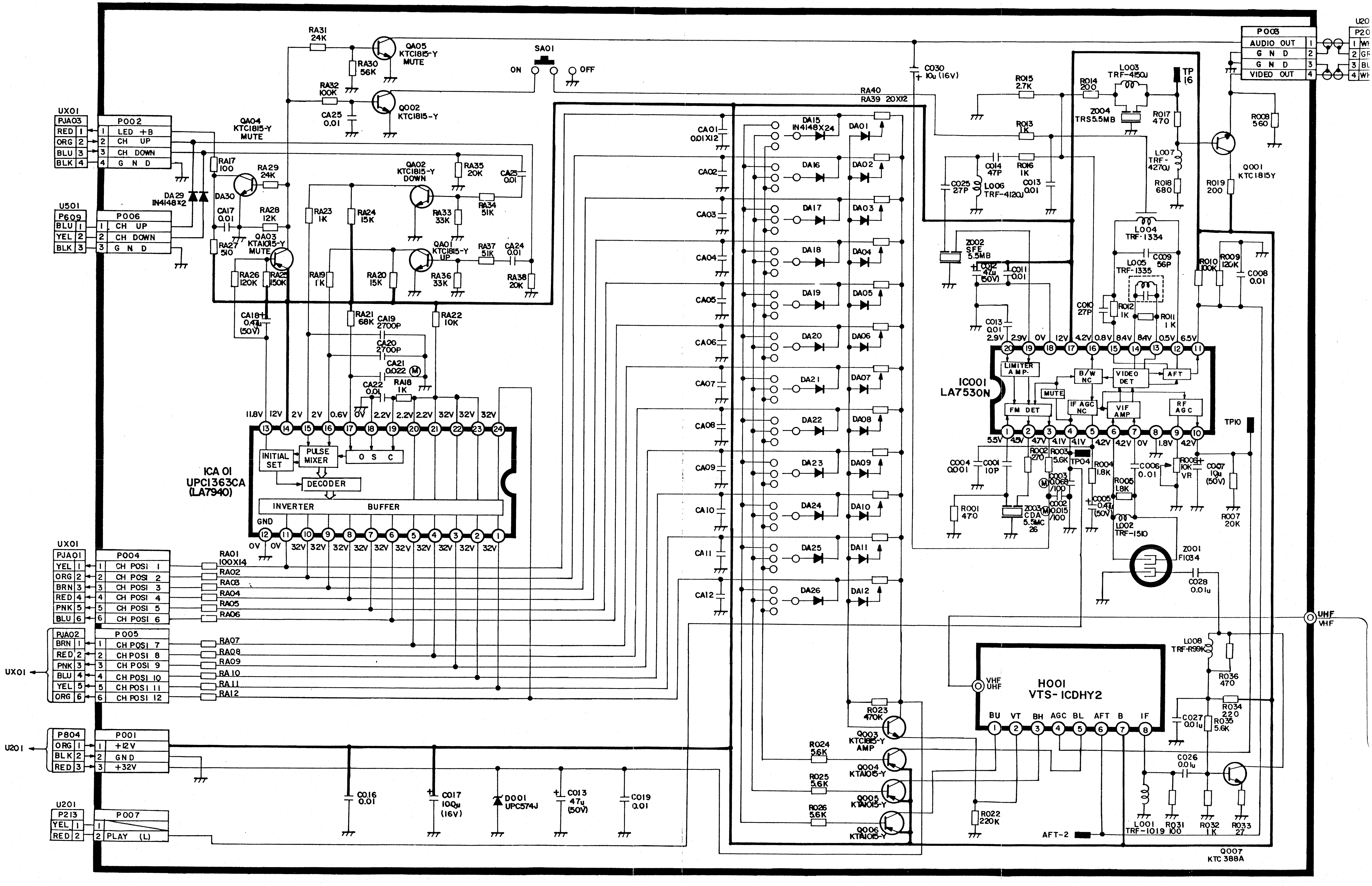
U501 LOGIC CIRCUIT
SW PULSE
SØ
MEMORY (L)
CAP REVERSE (H)
STILL (H)
+5V
CYL ON(H)
FULL ERASE(L)
CAP ON(L)
M 12V
PLAY (L)
SP (L)
SP (H)
+12V
M-GND
IC501 AN6359N
C.FG
379Hz
758Hz
COUNTER
SP/LP
GAIN SELECT
OUTPUT SELECT
GAIN SW
C501 1μF(50V)
R530 1M
IC502 MN6168K0A
CYL SPEED
CYL PHASE
CAP SPEED
CAP PHASE
REF
TP501
TP502
TP503
TP504
TP505
TP506
R508 68K
R510 2.2K
C502 1000P
R501 150K
R502 56K
R503 270K
R504 150K
R505 10K
R506 5.6K
R507 100K
C517 4700P
Q503 2SC1815-Y
C523 47μ (10V)
C524 0.1μ
C525 5600P
C526 1000P
IC503 AN6346N
DELAY
FORWARD
P.B CTL
R511 100K
R512 100K
R513 39K
R514 39K
R515 50KB
C504 10μ (16V)
C505 0.01
C506 0.022
C507 0.022
C508 0.27
C512 10μ (16V)
C513 1μ (50V)
R516 180Ω
C509 47μ (10V)
C510 47μ (10V)
C516 1μ (50V)
R543 120K
R546 10K
R517 2.2K
C511 0.027
P504
TRACKING
STILL (H)
P506
CTL
SW PULSE
VIDEO GND
ENV
P505
SW PULSE
V-SYNC
4.43M
P501
CTL HEAD
GND
P503
PG
CYLINDER FG
CYLINDER FG
V REG
H Ø 2
HCOM
H Ø 1
Ø 2 +
Ø 1 +
Ø 2 −
Ø 1 −
GND
IC505 BA6411
CONTROL AMP
Ø1 HALL AMP
Ø2 HALL AMP
Ø1 AMP
Ø2 AMP
Ø1 DRIVER
Ø2 DRIVER
C530 0.022
C531 0.022
R541 2K
R542 2K
R525 47K
D506 1N4148
C630 470μ (10V)
IC504 TA75902
R519 33K
R518 150K
R520 2K
R521 120K
R523 750K
C522 0.022
C519 220μ (10V)
C520 0.1μ
C521 5600P
R524 10K
Q505 2SD1275
R528 1K
R527 33K
D504 1N4148
C527 50V 1μ (NP)
R526 3.6K
C537 103
D508 1N4148×2
D509
R547 4.7K
R536 1M
C536 1μ (50V)
R537 10K
C535 50V 1μ NP
R549 1K
R538 10K
C529 10μ (16V)
Q508 2SC1815
R548 4.7K
C534 1500P
R535 10K
C532 2200P
C533 0.1
R522 33K
R533 1K
R532 2.7M
R531 15K
R534 8.2K
C528 22μ (10V)
Q504 2SC1815-Y
R544 200(G)
R545 10K(G)
R539 15K(G)
R540 22K(G)
D505 1N4148
C518 47μ (10V)
R551 22K
R550 22K
Q510 2SC1815
R554 33K
D503 1N4148
Q509 2SC1815-Y
R555 10K
R529 6.8K
Q506 UN4213
R552 10K
R553 4.7K
C514 47μ (16V)
CAPSTAN MOTOR
PH502
ORG
BLK
WHT
YEL
BLU
GRN
PJ502
+12V
M-GND
CAPSTAN IN
F/R
CAPSTAN FG
CAPSTAN FG

SINCE THE CIRCUIT DIAGRAM IS A STANDARD (
THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE
SUBJECT TO CHANGE FOR IMPROVEMENT WITH
ANY NOTICE.

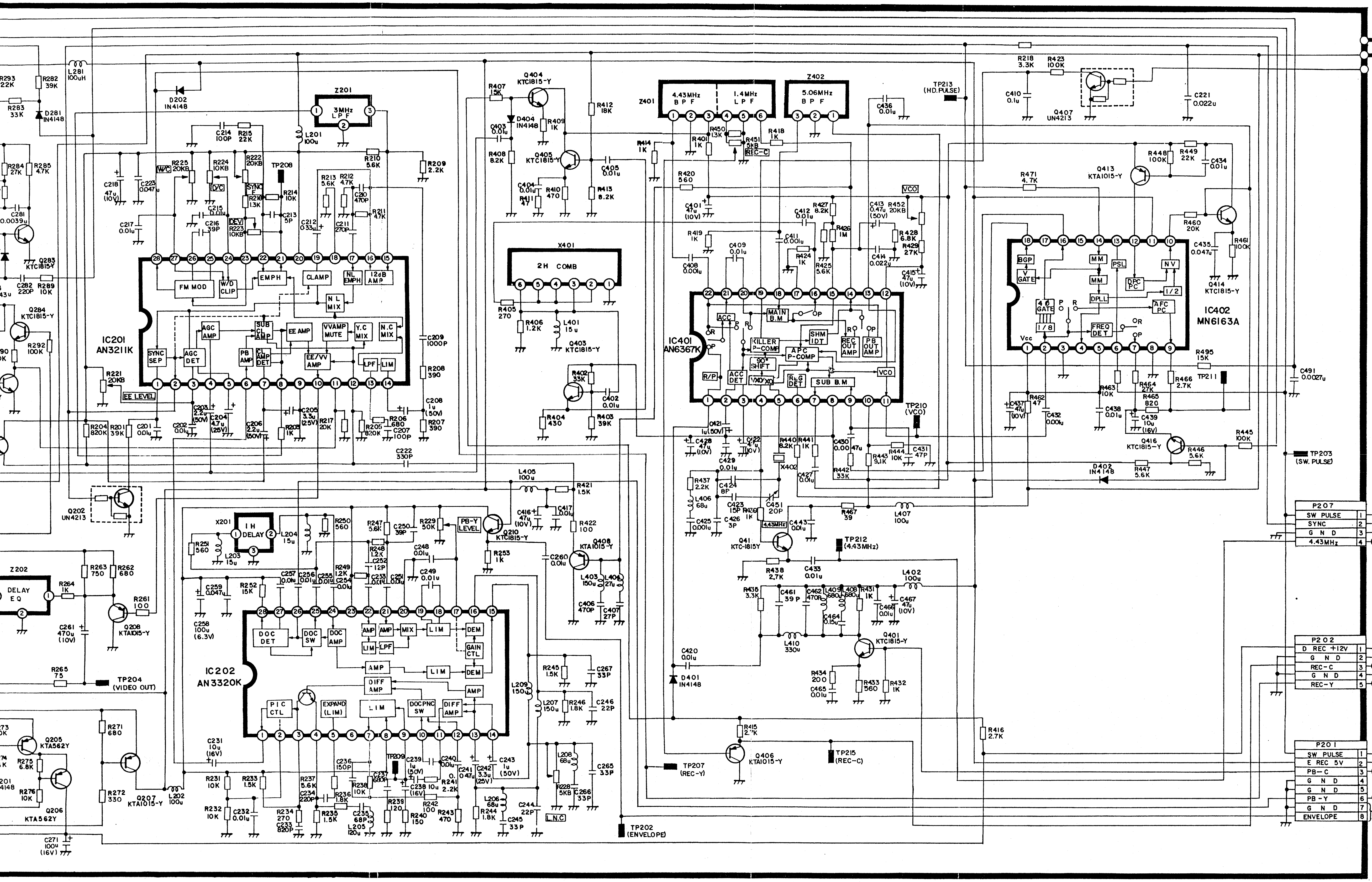
ELECTOR CIRCUIT (30DAP GAA)


RA31 24K
QA05 KTC1815-Y MUTE
RA30 56K
RA32 100K
Q002 KTC1815-Y
CA25 0.01
SA01
ON
OFF
C030 10u (16V)
RA40
RA39 20X12
QA02 KTC1815-Y DOWN
RA35 20K
CA23 0.01
RA34 51K
RA33 33K
RA23 1K
RA24 15K
QA01 KTC1815-Y UP
RA37 51K
CA24 0.01
RA19 1K
RA20 15K
RA36 33K
RA38 20K
RA21 68K
CA19 2700P
RA22 10K
CA20 2700P
CA21 0.022
CA22 0.01
RA18 1K
PULSE MIXER
O S C
DECODER
INVERTER
BUFFER
CA01 0.01X12
CA02
CA03
CA04
CA05
CA06
CA07
CA08
CA09
CA10
CA11
CA12
DA15 1N4148X24
DA16
DA17
DA18
DA19
DA20
DA21
DA22
DA23
DA24
DA25
DA26
DA01
DA02
DA03
DA04
DA05
DA06
DA07
DA08
DA09
DA10
DA11
DA12
R023 470K
Q003 KTC1815-Y AMP
R024 5.6K
Q004 KTA1015-Y
R025 5.6K
Q005 KTA1015-Y
R026 5.6K
Q006 KTA1015-Y
C016 0.01
C017 100u (16V)
D001 UPC574J
C013 47u (50V)
C019 0.01
R015 2.7K
R014 200
L003 TRF-4150J
TP 16
Z004 TRS5.5MB
R017 470
R013 1K
C014 47P
R016 1K
C025 27P
L006 TRF-4120J
C013 0.01
L007 TRF-4270J
R018 680
L004 TRF-1334
Z002 SFE 5.5MB
C012 47u (50V)
C011 0.01
L005 TRF-1335
C009 56P
C010 27P
R012 1K
R011 1K
C013 0.01
IC001 LA7530N
LIMITER AMP.
B/W NC
VIDEO DET
AFT
MUTE
FM DET
IF AGC NC
VIF AMP
RF AGC
TP10
C004 0.001
C001 10P
R002 270
R003 5.6K
TP04
C003 0.068 /100
R004 1.8K
C006 0.01
R006 10K VR
C007 10u (50V)
R001 470
Z003 CDA 5.5MC 26
C002 0.015 /100
R005 1.8K
C005 0.47u (50V)
L002 TRF-1510
R007 20K
Z001 F1034
C028 0.01u
P003
AUDIO OUT
G N D
VIDEO OUT
U201
P205
WHT1
GRY
BLU
WHT2
R008 560
Q001 KTC1815Y
R019 200
R010 100K
R009 120K
C008 0.01
UHF VHF
L008 TRF-R99K
R036 470
H001 VTS-1CDHY2
BU VT BH AGC BL AFT B IF
C027 0.01u
R034 220
R035 5.6K
C026 0.01u
R022 220K
AFT-2
L001 TRF-1019
R031 100
R032 1K
R033 27
Q007 KTC 388A
ANTENNA TERMINAL BOARD
RF MODULATOR
ANT IN
RF OUT
UHF VHF
RF001
MODULATOR B+
AUDIO IN
G N D
VIDEO IN
BOOSTER B+
U201
P204
RED
WHT1
BLU
WHT2
GRY
ORG

U001 PIF SELECTOR CIRCUIT (30DAP GAA)


P008
AUDIO OUT
G N D
G N D
VIDEO OUT
SA01
ON
OFF
QA05 KTC1815-Y MUTE
Q002 KTC1815-Y
RA31 24K
RA30 56K
RA32 100K
CA25 0.01
C030 10u (16V)
RA40
RA39 20X12
UX01
PJA03
RED
ORG
BLU
BLK
P002
LED +B
CH UP
CH DOWN
G N D
QA04 KTC1815-Y MUTE
U501
P609
P006
CH UP
CH DOWN
G N D
DA29 1N4148x2
DA30
RA17 100
RA29 24K
CA17 0.01
RA28 12K
RA27 510
QA03 KTA1015-Y MUTE
RA26 120K
RA25 150K
QA02 KTC1815-Y DOWN
QA01 KTC1815-Y UP
RA35 20K
CA23 0.01
RA34 51K
RA33 33K
RA37 51K
CA24 0.01
RA36 33K
RA38 20K
RA23 1K
RA24 15K
RA19 1K
RA20 15K
RA21 68K
RA22 10K
CA18 0.47u (50V)
CA19 2700P
CA20 2700P
CA21 0.022
CA22 0.01
RA18 1K
ICA 01
UPC1363CA (LA7940)
INITIAL SET
PULSE MIXER
O S C
DECODER
INVERTER
BUFFER
GND
P004
CH POSI 1
CH POSI 2
CH POSI 3
CH POSI 4
CH POSI 5
CH POSI 6
PJA01
YEL
ORG
BRN
RED
PNK
BLU
RA01 100X14
RA02
RA03
RA04
RA05
RA06
PJA02
P005
CH POSI 7
CH POSI 8
CH POSI 9
CH POSI 10
CH POSI 11
CH POSI 12
RA07
RA08
RA09
RA10
RA11
RA12
U201
P804
P001
+12V
GND
+32V
C016 0.01
C017 100u (16V)
D001 UPC574J
C013 47u (50V)
C019 0.01
P213
P007
PLAY (L)
CA01 0.01X12
CA02
CA03
CA04
CA05
CA06
CA07
CA08
CA09
CA10
CA11
CA12
DA15 1N4148X24
DA16
DA17
DA18
DA19
DA20
DA21
DA22
DA23
DA24
DA25
DA26
DA01
DA02
DA03
DA04
DA05
DA06
DA07
DA08
DA09
DA10
DA11
DA12
R023 470K
Q003 KTC1815-Y AMP
R024 5.6K
Q004 KTA1015-Y
R025 5.6K
Q005 KTA1015-Y
R026 5.6K
Q006 KTA1015-Y
R022 220K
H001
VTS-1CDHY2
VHF UHF
BU
VT
BH
AGC
BL
AFT
B
IF
AFT-2
L001 TRF-1019
R031 100
R032 1K
R033 27
Q007 KTC388A
C026 0.01u
C027 0.01u
R034 220
R035 5.6K
R036 470
L008 TRF-R99K
UHF
VHF
Z001 F1034
C028 0.01u
R015 2.7K
R014 200
L003 TRF-4150J
TP16
Z004 TRS5.5MB
R017 470
R013 1K
C014 47P
R016 1K
C013 0.01
C025 27P
L006 TRF-4120J
L007 TRF-4270J
R018 680
R019 200
Q001 KTC1815Y
R008 560
L004 TRF-1334
Z002 SFE 5.5MB
C012 47u (50V)
C011 0.01
L005 TRF-1335
C009 56P
C010 27P
R012 1K
R011 1K
R010 100K
R009 120K
C008 0.01
C013 0.01
IC001 LA7530N
LIMITER AMP.
B/W NC
VIDEO DET
AFT
MUTE
FM DET
IF AGC NC
VIF AMP
RF AGC
TP10
TP04
C004 0.001
C001 10P
R002 270
R003 5.6K
C003 0.068 /100
C002 0.015 /100
R004 1.8K
R005 1.8K
R006 10K VR
C006 0.01
C007 10u (50V)
C005 0.47u (50V)
R001 470
Z003 CDA 5.5MC 26
L002 TRF-1510
R007 20K

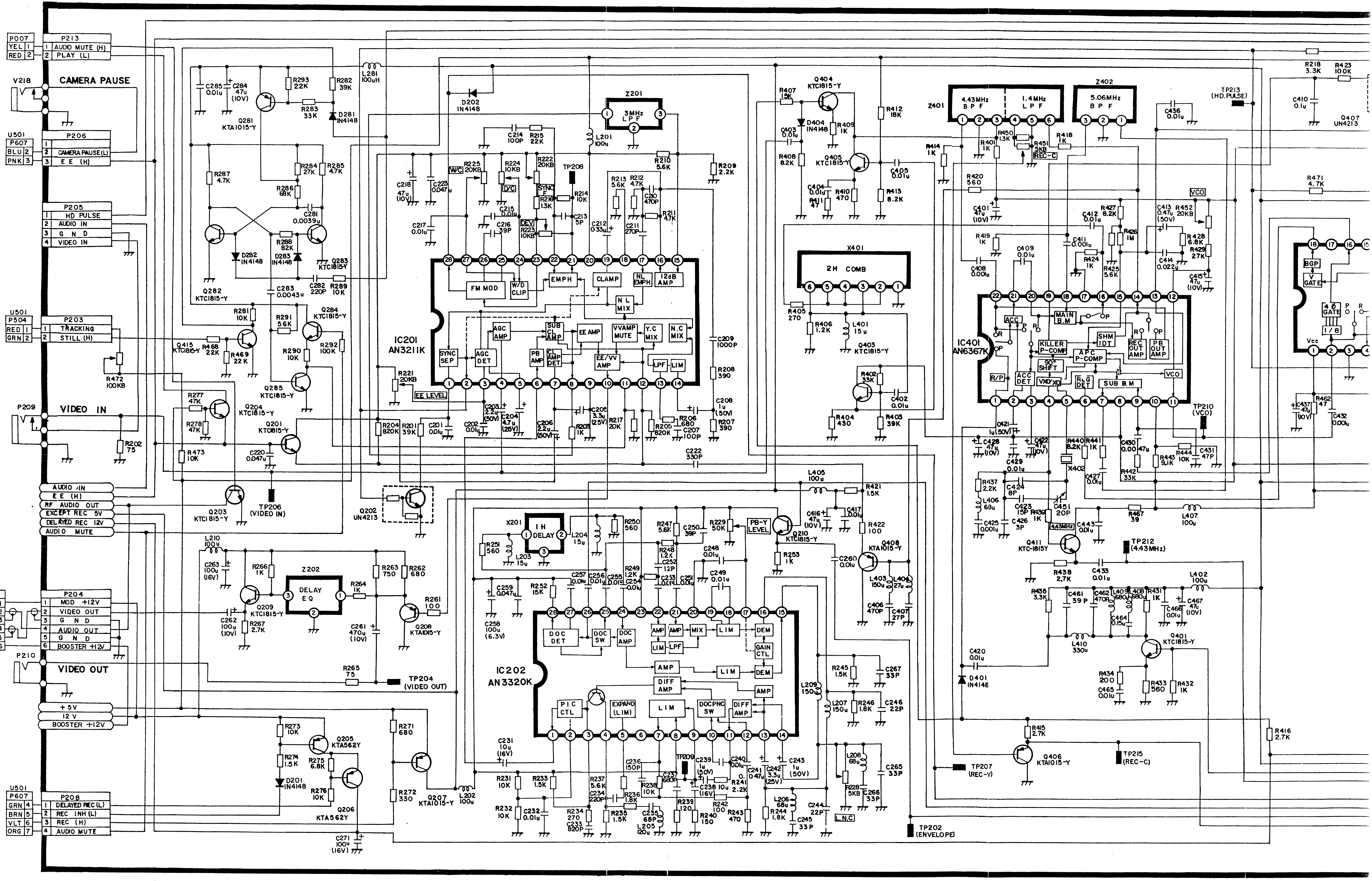
CUIT



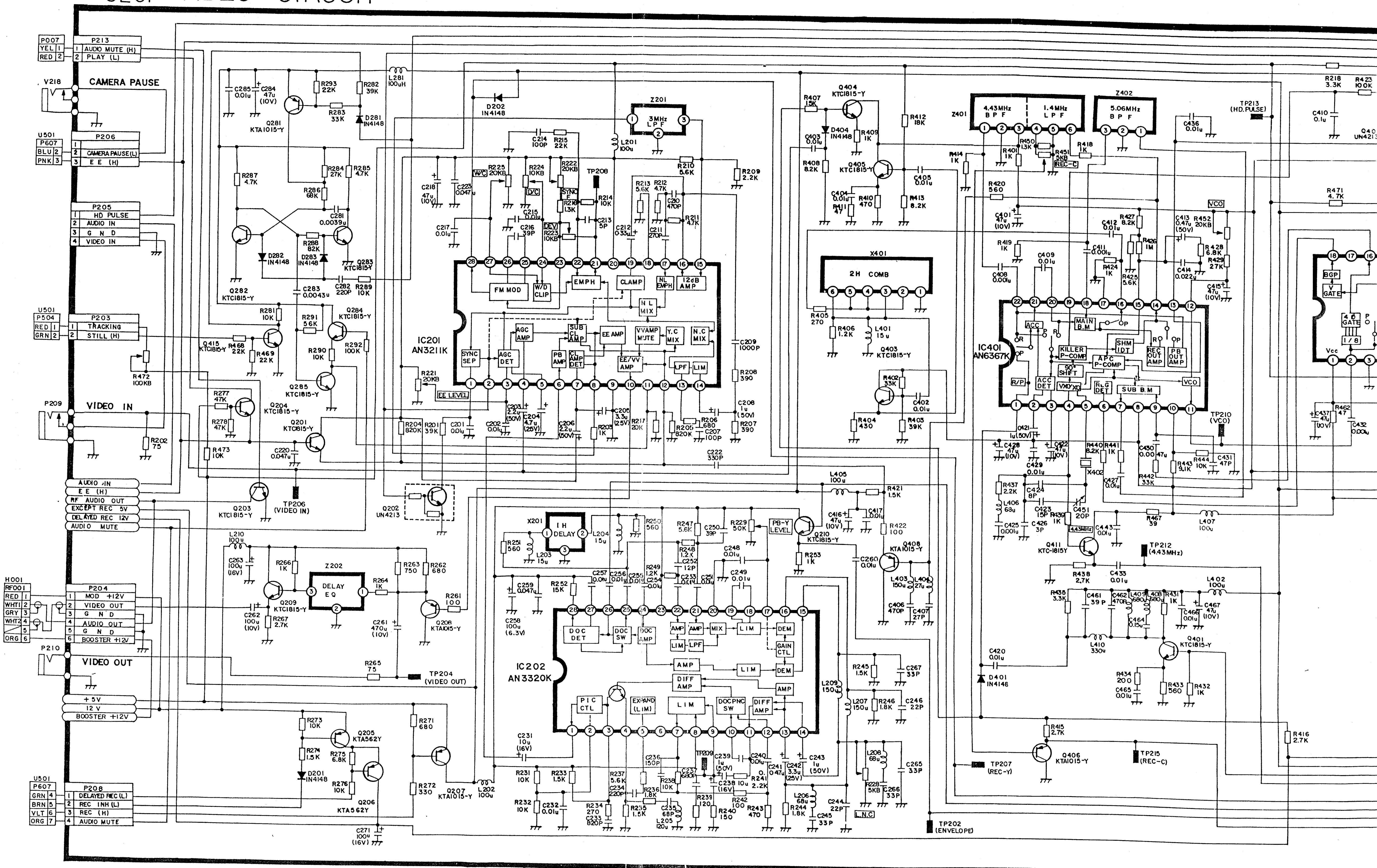
IC201
AN3211K
IC202
AN3320K
IC401
AN6367K
IC402
MN6163A
Z201
3MHz LPF
Z202
DELAY EQ
Z401
4.43MHz BPF
1.4MHz LPF
Z402
5.06MHz BPF
X401
2H COMB
X201
1H DELAY
X402
4.43MHz
FM MOD
W/D CLIP
EMPH
CLAMP
NL EMPH
12dB AMP
NL MIX
AGC AMP
SUB CL AMP
EE AMP
VVAMP MUTE
Y.C MIX
N.C MIX
SYNC SEP
AGC DET
PB AMP
CL AMP DET
EE/VV AMP
LPF
LIM
DOC DET
DOC SW
DOC AMP
AMP
MIX
DEM
GAIN CTL
DIFF AMP
PIC CTL
EXPAND (LIM)
DOCPNC SW
ACC
MAIN B.M
KILLER P-COMP
SHM IDT
REC OUT AMP
PB OUT AMP
90° SHIFT
APC P-COMP
VXO/XO
R/P
ACC DET
R-G DET
SUB B.M
VCO
BGP
V GATE
4.6 GATE
1/8
MM
PSL
DPC PC
NV
1/2
DPLL
AFC PC
FREQ DET
Vcc
EE LEVEL
PB-Y LEVEL
L.N.C
REC-C
W/C
D/C
SYNC
DEV
TP202 (ENVELOPE)
TP203 (SW. PULSE)
TP204 (VIDEO OUT)
TP207 (REC-Y)
TP208
TP209
TP210 (VCO)
TP211
TP212 (4.43MHz)
TP213 (HD.PULSE)
TP215 (REC-C)
S213
AUTO
COLOR
P207
SW PULSE
SYNC
GND
4.43MHz
U501
P505
BLU
WHT
YEL
RED
P202
D REC +12V
GND
REC-C
GND
REC-Y
U101
P102
YEL
GRY
WHT1
BLU
WHT2
P201
SW PULSE
E REC 5V
PB-C
GND
GND
PB-Y
GND
ENVELOPE
U101
P103
YEL
RED
WHT
GRN
BLU
WHT
TO SERVO
Q202 UN4213
Q205 KTA562Y
Q206 KTA562Y
Q207 KTA1015-Y
Q208 KTA1015-Y
Q210 KTC1815-Y
Q283 KTC1815-Y
Q284 KTC1815-Y
Q401 KTC1815-Y
Q403 KTC1815-Y
Q404 KTC1815-Y
Q405 KTC1815-Y
Q406 KTA1015-Y
Q407 UN4213
Q408 KTA1015-Y
Q413 KTA1015-Y
Q414 KTC1815-Y
Q416 KTC1815-Y
Q41 KTC-1815Y
D202 1N4148
D281 1N4148
D401 1N4148
D402 1N4148
D404 1N4148
L281 100uH
L201 100u
L202 100u
L203 15u
L204 15u
L205 120u
L206 68u
L207 150u
L208 68u
L209 150u
L401 15u
L402 100u
L403 150u
L404 27u
L405 100u
L406 68u
L407 100u
L408 680u
L409 680u
L410 330u
R201 39K
R202 1K
R204 820K
R205 820K
R206 680
R207 390
R208 390
R209 2.2K
R210 5.6K
R211 4.7K
R212 4.7K
R213 5.6K
R214 10K
R215 22K
R216 1.3K
R217 20K
R218 3.3K
R221 20KB
R222 20KB
R223 10KB
R224 10KB
R225 20KB
R228 5KB
R229 50K
R231 10K
R232 10K
R233 1.5K
R234 270
R235 1.5K
R236 1.8K
R237 5.6K
R238 10K
R239 120
R240 150
R241 2.2K
R242 100
R243 470
R244 1.8K
R245 1.5K
R246 1.8K
R247 5.6K
R248 1.2K
R249 1.2K
R250 560
R251 560
R252 15K
R253 1K
R261 100
R262 680
R263 750
R264 1K
R265 75
R271 680
R272 330
R275 6.8K
R276 10K
R282 39K
R283 33K
R284 27K
R285 4.7K
R289 10K
R292 100K
R293 22K
R401 1K
R402 33K
R403 39K
R404 430
R405 270
R406 1.2K
R407 15K
R408 8.2K
R409 1K
R410 470
R411 47
R412 18K
R413 8.2K
R414 1K
R415 2.7K
R416 2.7K
R418 1K
R419 1K
R420 560
R421 1.5K
R422 100
R423 100K
R424 1K
R425 5.6K
R426 1M
R427 8.2K
R428 6.8K
R429 27K
R431 1K
R432 1K
R433 560
R434 200
R435 3.3K
R437 2.2K
R438 2.7K
R440 8.2K
R441 1K
R442 33K
R443 9.1K
R444 10K
R445 100K
R446 5.6K
R447 5.6K
R448 100K
R449 22K
R450 13K
R451 5KB
R452 20KB
R460 20K
R461 100K
R462 47
R463 10K
R464 27K
R465 820
R466 2.7K
R467 39
R471 4.7K
R495 15K
C201 0.01u
C202 0.01u
C203 2.2u (50V)
C204 4.7u (25V)
C205 3.3u (25V)
C206 2.2u (50V)
C207 100P
C208 1u (50V)
C209 1000P
C210 470P
C211 270P
C212 0.33u
C213 5P
C214 100P
C215 0.01u
C216 39P
C217 0.01u
C218 47u (10V)
C221 0.022u
C222 330P
C223 0.047u
C231 10u (16V)
C232 0.01u
C233 820P
C234 220P
C235 68P
C236 150P
C237 680P
C238 10u (16V)
C239 1u (50V)
C240 0.01u
C241 0.047u
C242 3.3u (25V)
C243 1u (50V)
C244 22P
C245 33P
C246 22P
C248 0.01u
C249 0.01u
C250 39P
C251 0.01u
C252 12P
C253 0.01u
C254 0.01u
C255 0.01u
C256 0.01u
C257 0.01u
C258 100u (6.3V)
C259 0.047u
C260 0.01u
C261 470u (10V)
C265 33P
C266 33P
C267 33P
C271 100u (16V)
C281 0.0039u
C282 220P
C401 47u (10V)
C402 0.01u
C403 0.01u
C404 0.01u
C405 0.01u
C406 470P
C407 27P
C408 0.001u
C409 0.01u
C410 0.1u
C411 0.001u
C412 0.01u
C413 0.47u (50V)
C414 0.022u
C415 47u (10V)
C416 47u (10V)
C417 0.01u
C420 0.01u
C421 1u (50V)
C422 47u (10V)
C423 15P
C424 8P
C425 0.001u
C426 3P
C427 0.01u
C428 47u (10V)
C429 0.01u
C430 0.0047u
C431 47P
C432 0.001u
C433 0.01u
C434 0.01u
C435 0.047u
C436 0.01u
C437 47u (10V)
C438 0.01u
C439 10u (16V)
C443 0.01u
C451 20P
C461 39P
C462 470P
C464 0.15u
C465 0.01u
C466 0.01u
C467 47u (10V)
C491 0.0027u

SINCE THE CIRCUIT DIAGRAM IS A STANDARD ONE, THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

U201 VIDEO CIRCUIT


P007
YEL 1
RED 2
P213
1 AUDIO MUTE (H)
2 PLAY (L)
V218
CAMERA PAUSE
U501
P607
BLU 2
PNK 3
P206
2 CAMERA PAUSE (L)
3 E E (H)
P205
1 HD PULSE
2 AUDIO IN
3 G N D
4 VIDEO IN
U501
P504
RED 1
GRN 2
P203
1 TRACKING
2 STILL (H)
P209
VIDEO IN
AUDIO IN
E E (H)
RF AUDIO OUT
EXCEPT REC 5V
DELAYED REC 12V
AUDIO MUTE
H001
RF001
RED 1
WHT1 2
GRY 3
WHT2 4
5
ORG 6
P204
1 MOD +12V
2 VIDEO OUT
3 G N D
4 AUDIO OUT
5 G N D
6 BOOSTER +12V
P210
VIDEO OUT
+5V
12 V
BOOSTER +12V
U501
P607
GRN 4
BRN 5
VLT 6
ORG 7
P208
1 DELAYED REC (L)
2 REC INH (L)
3 REC (H)
4 AUDIO MUTE
Q281 KTA1015-Y
Q282 KTC1815-Y
Q283 KTC1815-Y
Q284 KTC1815-Y
Q285 KTC1815-Y
Q415 KTC1815-Y
Q204 KTC1815-Y
Q201 KTC1815-Y
Q203 KTC1815-Y
Q202 UN4213
Q209 KTC1815-Y
Q208 KTA1015-Y
Q205 KTA562Y
Q206 KTA562Y
Q207 KTA1015-Y
D281 1N4148
D282 1N4148
D283 1N4148
D202 1N4148
D201 1N4148
L281 100uH
L201 100u
L210 100u
L202 100u
TP206 (VIDEO IN)
TP204 (VIDEO OUT)
TP208
Z201 3MHz L P F
Z202 DELAY EQ
IC201 AN3211K
FM MOD
W/D CLIP
EMPH
CLAMP
NL EMPH
12dB AMP
N L MIX
AGC AMP
SUB CL AMP
EE AMP
VVAMP MUTE
Y.C MIX
N.C MIX
SYNC SEP
AGC DET
PB AMP
CL AMP DET
EE/VV AMP
LPF
LIM
EE LEVEL
W/C
D/C
SYNC F
DEV
X201 1H DELAY
IC202 AN3320K
DOC DET
DOC SW
DOC AMP
AMP
LIM
LPF
MIX
DEM
GAIN CTL
DIFF AMP
PIC CTL
EXPAND (LIM)
DOCPNC SW
PB-Y LEVEL
Q210 KTC1815-Y
Q408 KTA1015-Y
TP209
TP202 (ENVELOPE)
TP207 (REC-Y)
TP215 (REC-C)
L.N.C
Q404 KTC1815-Y
Q405 KTC1815-Y
Q403 KTC1815-Y
D404 1N4148
X401 2H COMB
Z401 4.43MHz B P F
1.4MHz L P F
Z402 5.06MHz B P F
REC-C
VCO
IC401 AN6367K
ACC
MAIN B.M
KILLER P-COMP
SHM IDT
REC OUT AMP
PB OUT AMP
APC P-COMP
90° SHIFT
VXO
R/P
ACC DET
R.L.G DET
SUB B.M
TP210 (VCO)
TP212 (4.43MHz)
TP213 (HD.PULSE)
X402
4.43MHz
Q411 KTC-1815Y
Q401 KTC1815-Y
Q406 KTA1015-Y
D401 1N4148
Q407 UN4213
BGP
V GATE
4 Φ GATE
1/8
Vcc
R218 3.3K
R423 100K
R471 4.7K
R462 47
C410 0.1u
C436 0.01u
C437 47u 10V
C432 0.001u
R416 2.7K
R415 2.7K
L402 100u
L407 100u
L405 100u
R421 1.5K
R422 100
R467 39

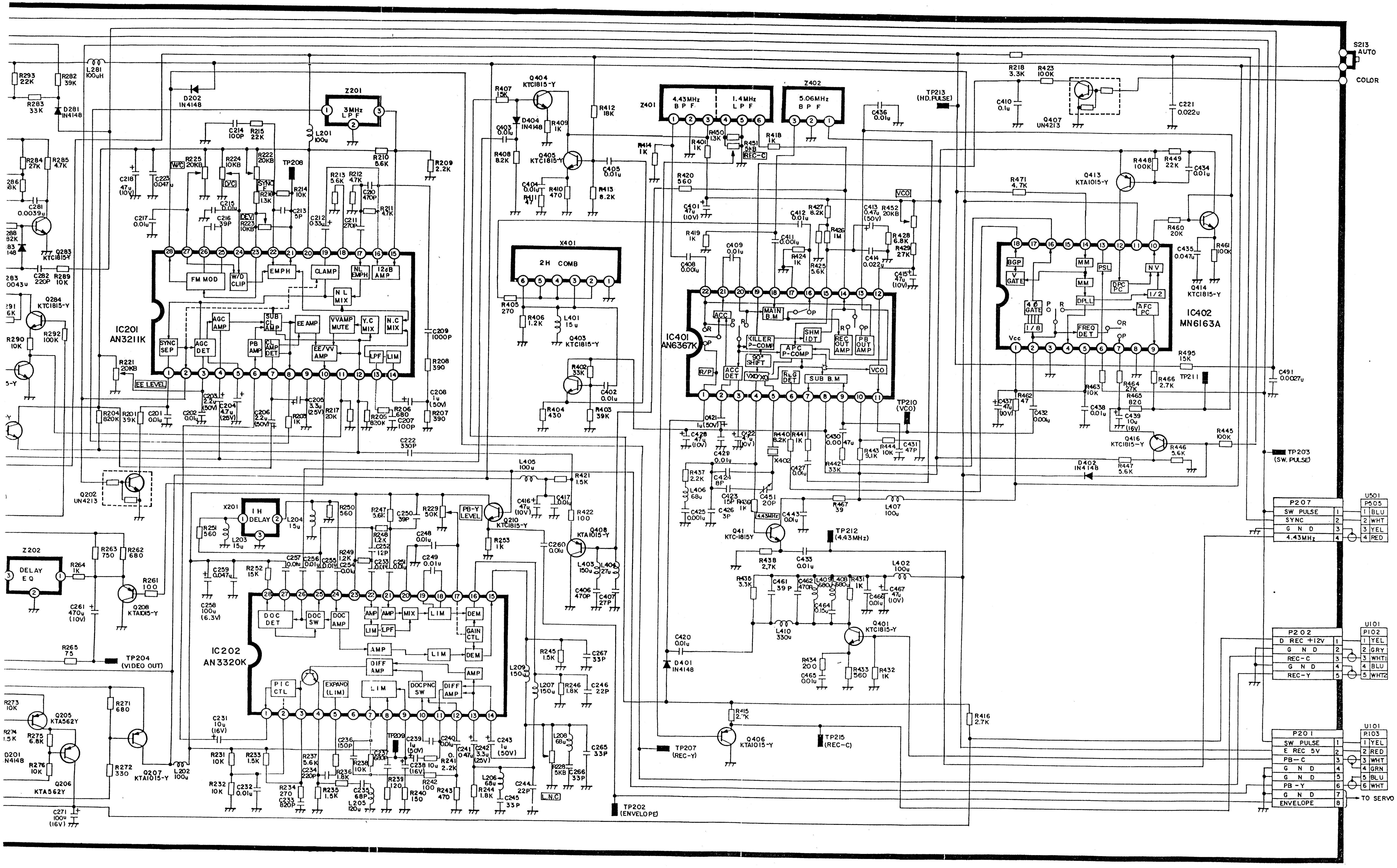
U201 VIDEO CIRCUIT



P007
YEL 1
RED 2
P213
1 AUDIO MUTE (H)
2 PLAY (L)
V218
CAMERA PAUSE
U501
P607
BLU 2
PNK 3
P206
2 CAMERA PAUSE(L)
3 E E (H)
P205
1 HD PULSE
2 AUDIO IN
3 G N D
4 VIDEO IN
U501
P504
RED 1
GRN 2
P203
1 TRACKING
2 STILL (H)
P209
VIDEO IN
AUDIO IN
E E (H)
RF AUDIO OUT
EXCEPT REC 5V
DELAYED REC 12V
AUDIO MUTE
H001
RF001
RED 1
WHT1 2
GRY 3
WHT2 4
5
ORG 6
P204
1 MOD +12V
2 VIDEO OUT
3 G N D
4 AUDIO OUT
5 G N D
6 BOOSTER +12V
P210
VIDEO OUT
+5V
12 V
BOOSTER +12V
U501
P607
GRN 4
BRN 5
VLT 6
ORG 7
P208
1 DELAYED REC (L)
2 REC INH (L)
3 REC (H)
4 AUDIO MUTE
Z201
3MHz LPF
IC201
AN3211K
FM MOD
W/D CLIP
EMPH
CLAMP
NL EMPH
12dB AMP
N L MIX
SYNC SEP
AGC DET
AGC AMP
SUB CL AMP
EE AMP
VVAMP MUTE
Y.C MIX
N.C MIX
PB AMP
CL AMP DET
EE/VV AMP
LPF
LIM
EE LEVEL
W/C
D/C
DEV
SYNC
TP208
TP206 (VIDEO IN)
TP204 (VIDEO OUT)
TP202 (ENVELOPE)
TP207 (REC-Y)
TP215 (REC-C)
TP212 (4.43MHz)
TP213 (HD.PULSE)
TP210 (VCO)
TP209
Z202
DELAY EQ
X201
1H DELAY
IC202
AN3320K
DOC DET
DOC SW
DOC AMP
AMP
MIX
LIM
DEM
GAIN CTL
DIFF AMP
PIC CTL
EXPAND (LIM)
DOCPNC SW
PB-Y LEVEL
L.N.C
X401
2H COMB
Z401
4.43MHz BPF
1.4MHz LPF
Z402
5.06MHz BPF
REC-C
VCO
IC401
AN6367K
ACC
MAIN B.M
SHM IDT
REC OUT AMP
PB OUT AMP
KILLER P-COMP
APC P-COMP
90° SHIFT
ACC DET
VXO
RLG DET
SUB B.M
R/P
X402
BGP
V GATE
4.6 GATE
1/8
Vcc
Q201 KTC1815-Y
Q202 UN4213
Q203 KTC1815-Y
Q204 KTC1815-Y
Q205 KTA562Y
Q206 KTA562Y
Q207 KTA1015-Y
Q208 KTA1015-Y
Q209 KTC1815-Y
Q210 KTC1815-Y
Q281 KTA1015-Y
Q282 KTC1815-Y
Q283 KTC1815-Y
Q284 KTC1815-Y
Q285 KTC1815-Y
Q415 KTC1815-Y
Q401 KTC1815-Y
Q403 KTC1815-Y
Q404 KTC1815-Y
Q405 KTC1815-Y
Q406 KTA1015-Y
Q408 KTA1015-Y
Q411 KTC-1815Y
D201 1N4148
D202 1N4148
D281 1N4148
D282 1N4148
D283 1N4148
D401 1N4148
D404 1N4148

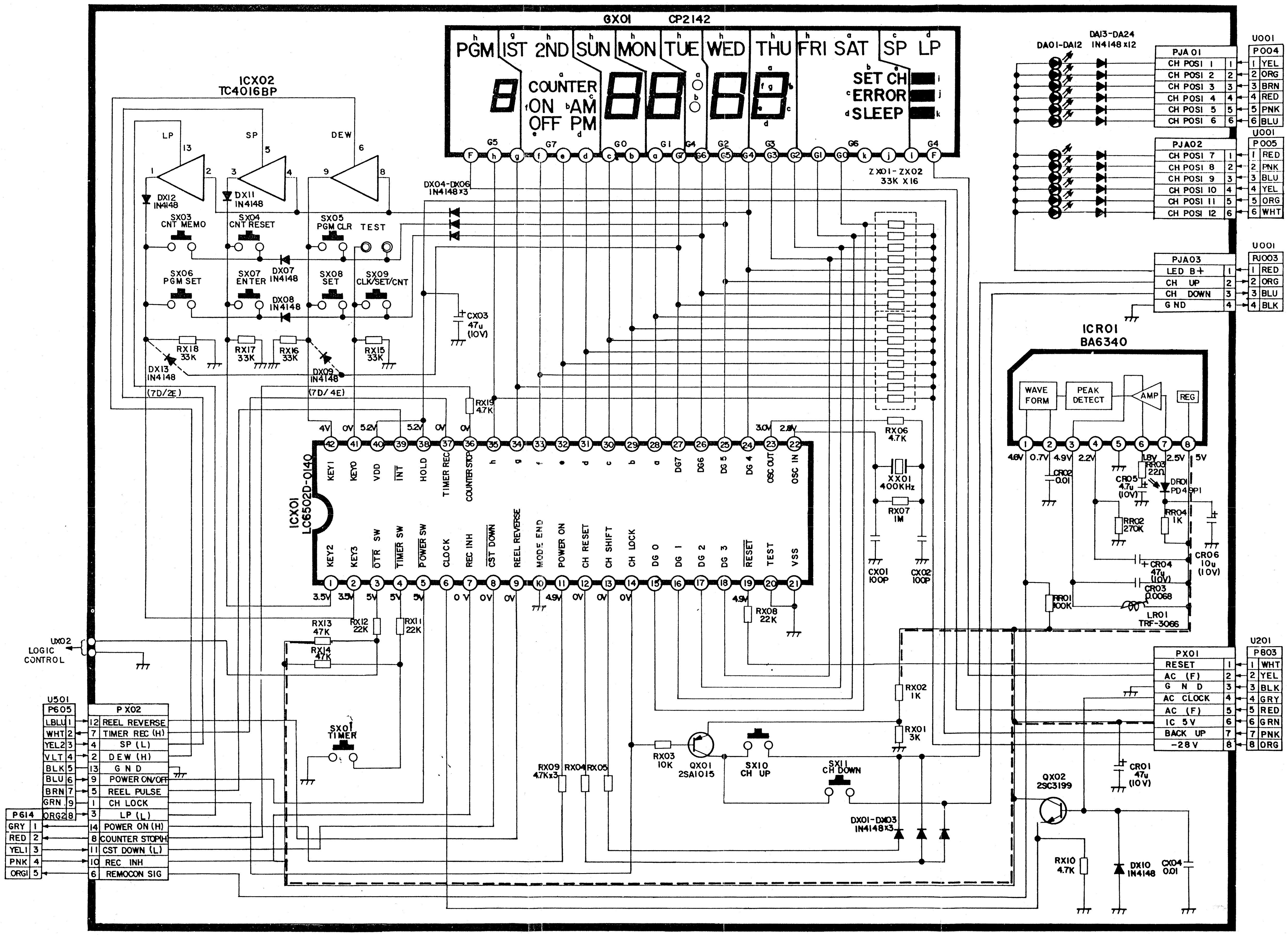
2

RCUIT


IC201
AN3211K
IC202
AN3320K
IC401
AN6367K
IC402
MN6163A
FM MOD
W/O CLIP
EMPH
CLAMP
NL EMPH
12dB AMP
N L MIX
SYNC SEP
AGC DET
AGC AMP
PB AMP
SUB CL AMP
CL AMP DET
EE AMP
VVAMP MUTE
Y.C MIX
N.C MIX
EE/VV AMP
LPF
LIM
EE LEVEL
DOC DET
DOC SW
DOC AMP
AMP
MIX
DEM
GAIN CTL
DIFF AMP
PIC CTL
EXPAND (LIM)
DOCPNC SW
ACC
MAIN B.M
KILLER P-COMP
SHM IDT
REC OUT AMP
PB OUT AMP
90° SHIFT
APC P-COMP
ACC DET
R/P
VXO
RLG DET
SUB B.M
VCO
BGP
V GATE
4/8 GATE
1/8
MM
DPLL
PSL
DPC PC
NV
1/2
AFC PC
FREQ DET
Vcc
Z201
3MHz LPF
Z202
DELAY EQ
X201
1H DELAY
X401
2H COMB
Z401
4.43MHz BPF
1.4MHz LPF
Z402
5.06MHz BPF
X402
PB-Y LEVEL
TP202 (ENVELOPE)
TP203 (SW. PULSE)
TP204 (VIDEO OUT)
TP207 (REC-Y)
TP208
TP209
TP210 (VCO)
TP211
TP212 (4.43MHz)
TP213 (HD.PULSE)
TP215 (REC-C)
Q202 UN4213
Q205 KTA562Y
Q206 KTA562Y
Q207 KTA1015-Y
Q208 KTA1015-Y
Q210 KTC1815-Y
Q283 KTC1815-Y
Q284 KTC1815-Y
Q401 KTC1815-Y
Q403 KTC1815-Y
Q404 KTC1815-Y
Q405 KTC1815-Y
Q406 KTA1015-Y
Q407 UN4213
Q408 KTA1015-Y
Q41 KTC-1815Y
Q413 KTA1015-Y
Q414 KTC1815-Y
Q416 KTC1815-Y
D202 1N4148
D281 1N4148
D401 1N4148
D402 1N4148
D404 1N4148
S213
AUTO
COLOR
P207
SW PULSE
SYNC
G N D
4.43MHz
U501
P505
1 BLU
2 WHT
3 YEL
4 RED
P202
D REC +12V
G N D
REC-C
G N D
REC-Y
U101
P102
1 YEL
2 GRY
3 WHT1
4 BLU
5 WHT2
P201
SW PULSE
E REC 5V
PB-C
G N D
G N D
PB-Y
G N D
ENVELOPE
U101
P103
1 YEL
2 RED
3 WHT
4 GRN
5 BLU
6 WHT
TO SERVO

SINCE THE CIRCUIT DIAGRAM IS A STANDARD ONE, THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

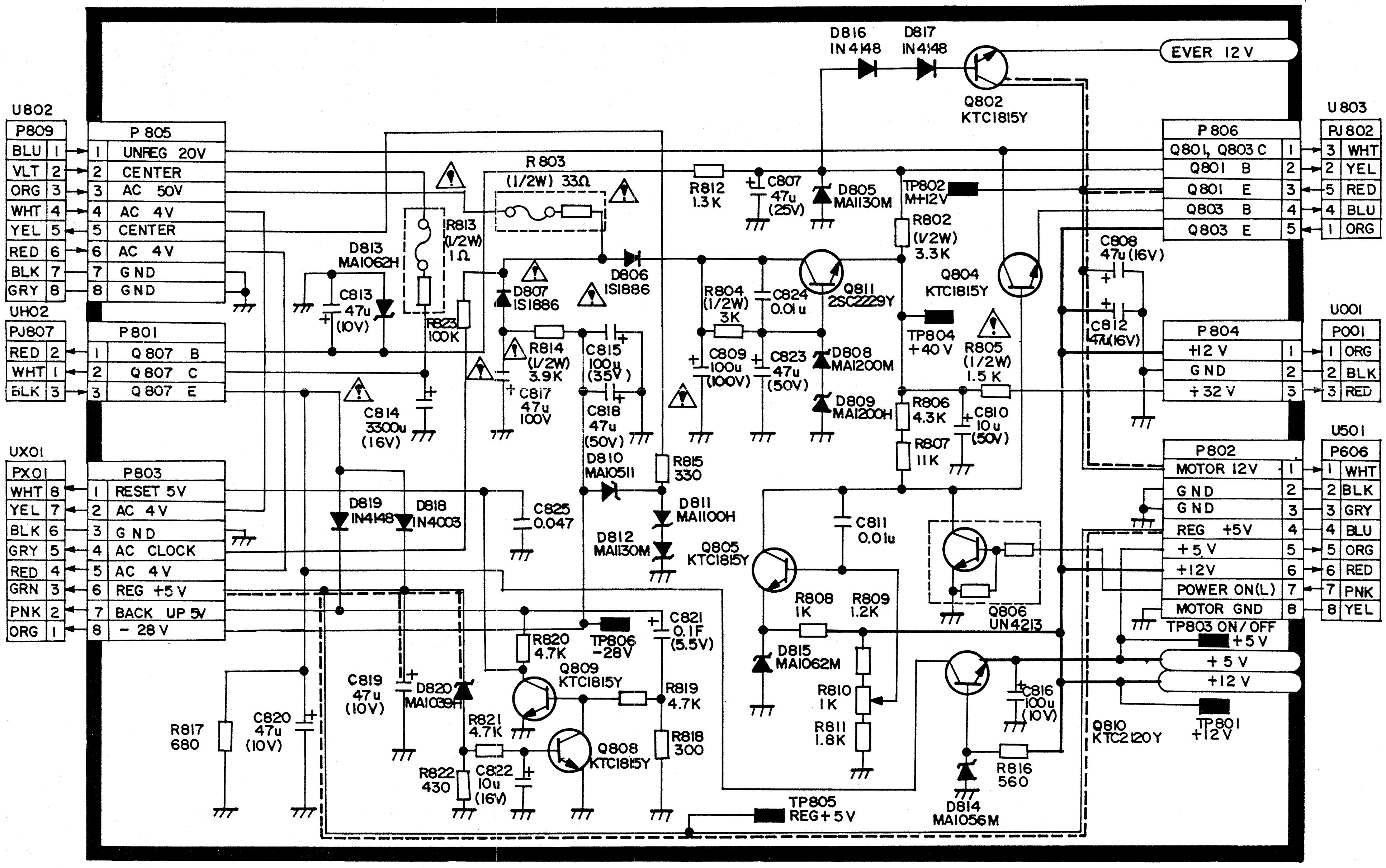
UX01 TIMER CIRCUIT


GX01 CP2142
PGM 1ST 2ND SUN MON TUE WED THU FRI SAT SP LP
COUNTER ON OFF AM PM
SET CH ERROR SLEEP
ICX02 TC4016BP
LP SP DEW
DX12 1N4148
DX11 1N4148
SX03 CNT MEMO
SX04 CNT RESET
SX05 PGM CLR
TEST
SX06 PGM SET
SX07 ENTER
DX07 1N4148
SX08 SET
SX09 CLK/SET/CNT
DX08 1N4148
RX18 33K
RX17 33K
RX16 33K
RX15 33K
DX13 1N4148
DX09 1N4148
(7D/2E)
(7D/4E)
DX04-DX06 1N4148x3
CX03 47u (10V)
RX19 4.7K
ZX01-ZX02 33K X16
ICX01 LC6502D-0140
KEY1 KEY0 VDD INT HOLD TIMER REC COUNTER STOP h g f e d c b a DG7 DG6 DG5 DG4 OSC OUT OSC IN
KEY2 KEY3 OTR SW TIMER SW POWER SW CLOCK REC INH CST DOWN REEL REVERSE MODE END POWER ON CH RESET CH SHIFT CH LOCK DG0 DG1 DG2 DG3 RESET TEST VSS
RX06 4.7K
XX01 400KHz
RX07 1M
CX01 100P
CX02 100P
RX08 22K
RX13 47K
RX14 47K
RX12 22K
RX11 22K
UX02 LOGIC CONTROL
SX01 TIMER
RX09 4.7Kx3 RX04 RX05
RX03 10K
QX01 2SA1015
SX10 CH UP
SX11 CH DOWN
DX01-DX03 1N4148x3
RX02 1K
RX01 3K
QX02 2SC3199
RX10 4.7K
DX10 1N4148
CX04 0.01
CR01 47u (10V)
ICR01 BA6340
WAVE FORM
PEAK DETECT
AMP
REG
CR02 0.01
CR05 4.7u (10V)
RR03 22Ω
DR01 PD49P1
RR04 1K
RR02 270K
CR04 47u (10V)
CR06 10u (10V)
CR03 0.0068
RR01 100K
LR01 TRF-3066
DA01-DA12
DA13-DA24 1N4148x12
U001 P004 PJA01
CH POSI 1 YEL
CH POSI 2 ORG
CH POSI 3 BRN
CH POSI 4 RED
CH POSI 5 PNK
CH POSI 6 BLU
U001 P005 PJA02
CH POSI 7 RED
CH POSI 8 PNK
CH POSI 9 BLU
CH POSI 10 YEL
CH POSI 11 ORG
CH POSI 12 WHT
U001 RJ003 PJA03
LED B+ RED
CH UP ORG
CH DOWN BLU
GND BLK
U201 P803 PX01
RESET WHT
AC (F) YEL
GND BLK
AC CLOCK GRY
AC (F) RED
IC 5V GRN
BACK UP PNK
-28V ORG
U501 P605 PX02
LBLU 12 REEL REVERSE
WHT 7 TIMER REC (H)
YEL2 4 SP (L)
VLT 2 DEW (H)
BLK 13 GND
BLU 9 POWER ON/OFF
BRN 5 REEL PULSE
GRN 1 CH LOCK
ORG2 3 LP (L)
P614
GRY 14 POWER ON (H)
RED 8 COUNTER STOP(H)
YEL1 11 CST DOWN (L)
PNK 10 REC INH
ORG1 6 REMOCON SIG

SINCE THE CIRCUIT DIAGRAM IS A STANDARD ONE, THE CIRCUIT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

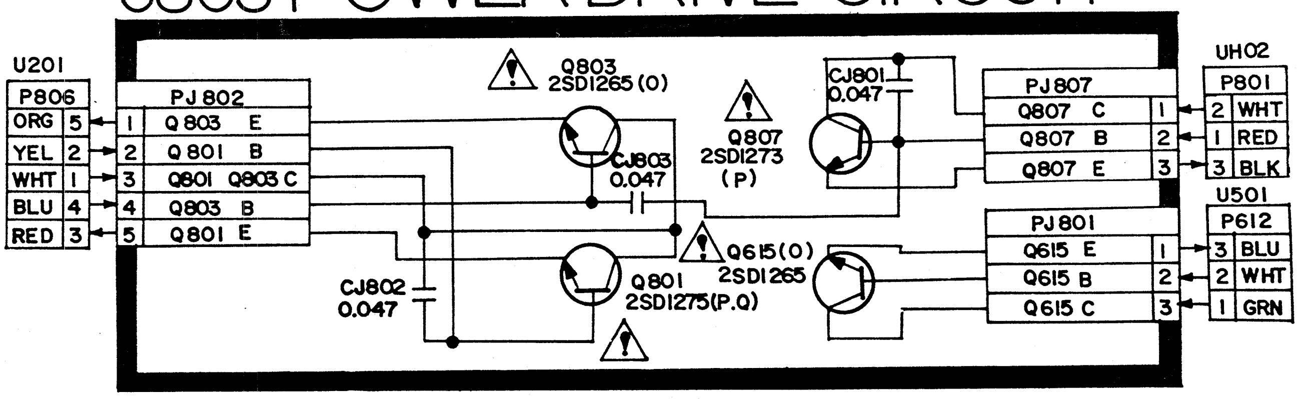
U201 POWER CIRCUIT

④


U802
P809
BLU 1
VLT 2
ORG 3
WHT 4
YEL 5
RED 6
BLK 7
GRY 8
P 805
1 UNREG 20V
2 CENTER
3 AC 50V
4 AC 4V
5 CENTER
6 AC 4V
7 GND
8 GND
UH02
PJ807
RED 2
WHT 1
BLK 3
P801
1 Q 807 B
2 Q 807 C
3 Q 807 E
UX01
PX01
WHT 8
YEL 7
BLK 6
GRY 5
RED 4
GRN 3
PNK 2
ORG 1
P803
1 RESET 5V
2 AC 4V
3 GND
4 AC CLOCK
5 AC 4V
6 REG +5V
7 BACK UP 5V
8 - 28V
D816 IN4148
D817 IN4148
Q802 KTC1815Y
EVER 12V
R803 (1/2W) 33Ω
R813 (1/2W) 1Ω
D813 MA1062H
C813 47u (10V)
R823 100K
C814 3300u (16V)
D807 IS1886
D806 IS1886
R814 (1/2W) 3.9K
C815 100u (35V)
C817 47u 100V
C818 47u (50V)
D810 MA10511
R815 330
D811 MA1100H
D812 MA1130M
D819 IN4148
D818 IN4003
C825 0.047
R812 1.3K
C807 47u (25V)
D805 MA1130M
R804 (1/2W) 3K
C824 0.01u
C809 100u (100V)
C823 47u (50V)
Q811 2SC2229Y
D808 MA1200M
D809 MA1200H
TP802 M+12V
R802 (1/2W) 3.3K
Q804 KTC1815Y
TP804 +40V
R805 (1/2W) 1.5K
R806 4.3K
R807 11K
C810 10u (50V)
C811 0.01u
Q805 KTC1815Y
R808 1K
R809 1.2K
D815 MA1062M
R810 1K
R811 1.8K
Q806 UN4213
C816 100u (10V)
Q810 KTC2120Y
R816 560
D814 MA1056M
TP805 REG+5V
C821 0.1F (5.5V)
TP806 -28V
R820 4.7K
Q809 KTC1815Y
R819 4.7K
R818 300
Q808 KTC1815Y
R821 4.7K
R822 430
C822 10u (16V)
C819 47u (10V)
D820 MA1039H
R817 680
C820 47u (10V)
C808 47u (16V)
C812 47u (16V)
U803
PJ802
P 806
Q801, Q803 C 1 → 3 WHT
Q801 B 2 → 2 YEL
Q801 E 3 ← 5 RED
Q803 B 4 → 4 BLU
Q803 E 5 ← 1 ORG
U001
P001
P804
+12 V 1 → 1 ORG
GND 2 → 2 BLK
+32 V 3 → 3 RED
U501
P606
P802
MOTOR 12V 1 → 1 WHT
GND 2 → 2 BLK
GND 3 → 3 GRY
REG +5V 4 → 4 BLU
+5 V 5 → 5 ORG
+12V 6 → 6 RED
POWER ON(L) 7 → 7 PNK
MOTOR GND 8 → 8 YEL
TP803 ON/OFF
+5 V
+5 V
+12 V
TP801 +12V

U803 POWER DRIVE CIRCUIT

⑤


U201
P806
ORG 5
YEL 2
WHT 1
BLU 4
RED 3
PJ 802
1 Q803 E
2 Q801 B
3 Q801 Q803 C
4 Q803 B
5 Q801 E
Q803 2SD1265(O)
CJ803 0.047
CJ802 0.047
Q801 2SD1275(P.Q)
Q807 2SD1273 (P)
CJ801 0.047
Q615(O) 2SD1265
UH02
P801
PJ807
Q807 C 1 2 WHT
Q807 B 2 1 RED
Q807 E 3 3 BLK
U501
P612
PJ801
Q615 E 1 3 BLU
Q615 B 2 2 WHT
Q615 C 3 1 GRN

CAUTION TO THE SERVICE TECHNICIANS; BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER TO MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.

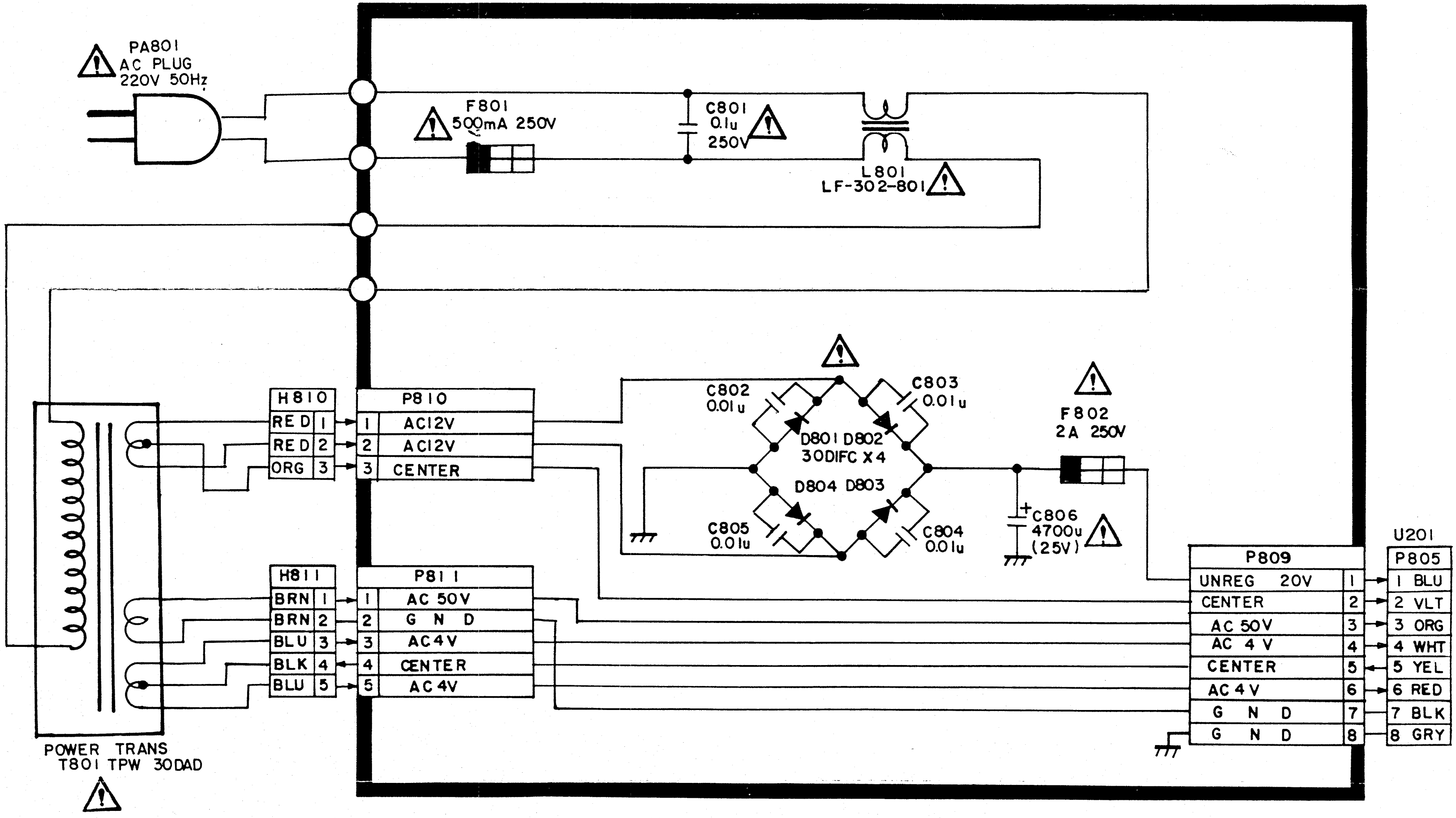
CAUTION: THE PARTS IDENTIFIED BY SHADING AND ⚠ MARK ARE CRITICAL FOR SAFETY REPLACE ONLY WITH TYPE IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT OR SPECIFIED IN THE "PARTLIST." DO NOT DEGRADE THE SAFETY OF THE APPLIANCE THROUGH IMPROPER SERVICING.

AN EXPLANATION OF THE SYMBOL

Marking Required	Symbol of Abbre Viation
Voltage	V
Hertz	Hz
Amperes	A
Watts	W
Fast Operating Fuse	■□□

③

LINEFILTER CIRCUIT



PA801
AC PLUG
220V 50Hz
F801
500mA 250V
C801
0.1u
250V
L801
LF-302-801
H810
RED 1
RED 2
ORG 3
P810
1 AC12V
2 AC12V
3 CENTER
H811
BRN 1
BRN 2
BLU 3
BLK 4
BLU 5
P811
1 AC 50V
2 G N D
3 AC4V
4 CENTER
5 AC4V
POWER TRANS
T801 TPW 30DAD
C802
0.01u
C803
0.01u
D801 D802
30DIFC X 4
D804 D803
C805
0.01u
C804
0.01u
F802
2A 250V
C806
4700u
(25V)
P809
UNREG 20V 1
CENTER 2
AC 50V 3
AC 4 V 4
CENTER 5
AC4V 6
G N D 7
G N D 8
U201
P805
1 BLU
2 VLT
3 ORG
4 WHT
5 YEL
6 RED
7 BLK
8 GRY

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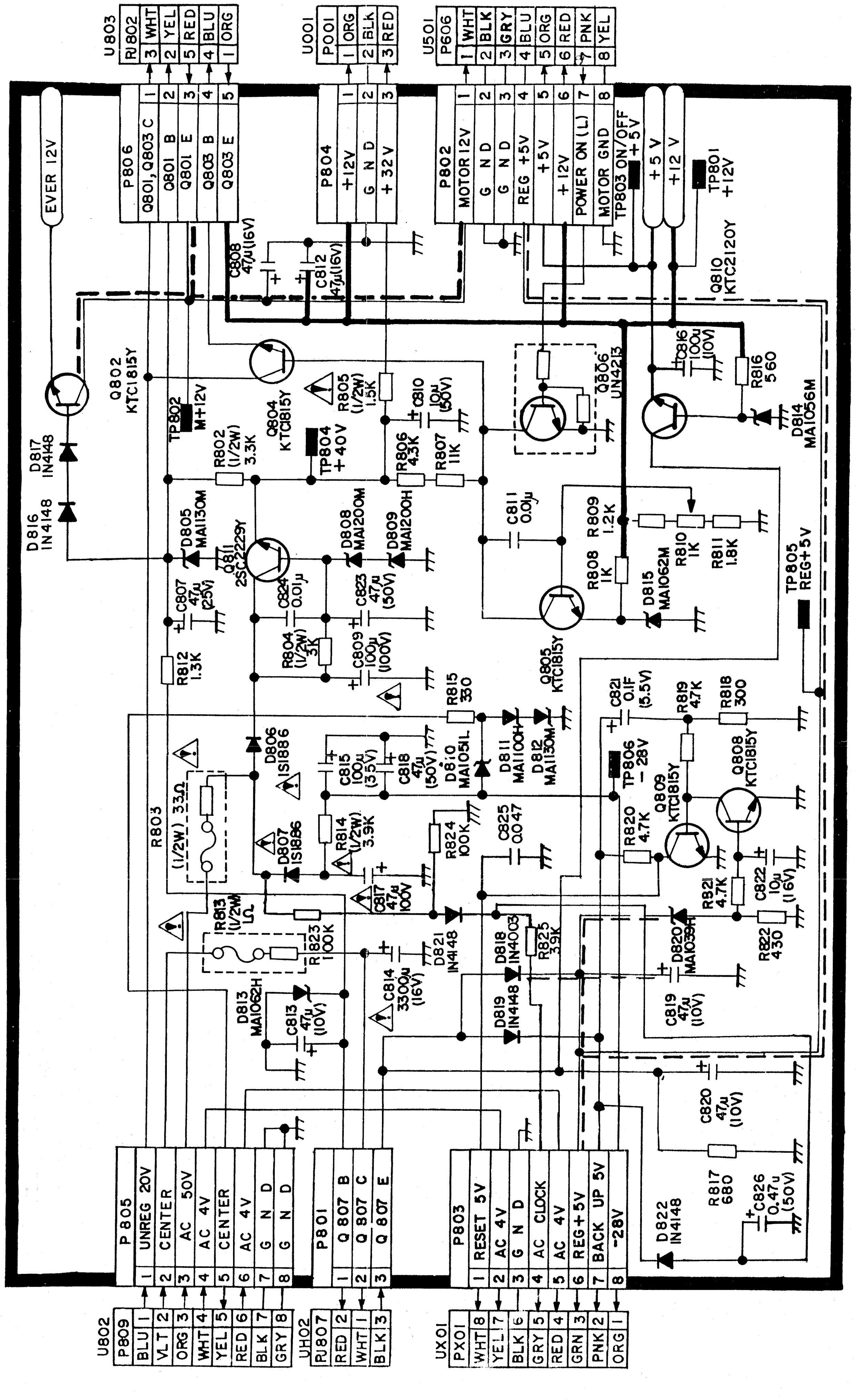
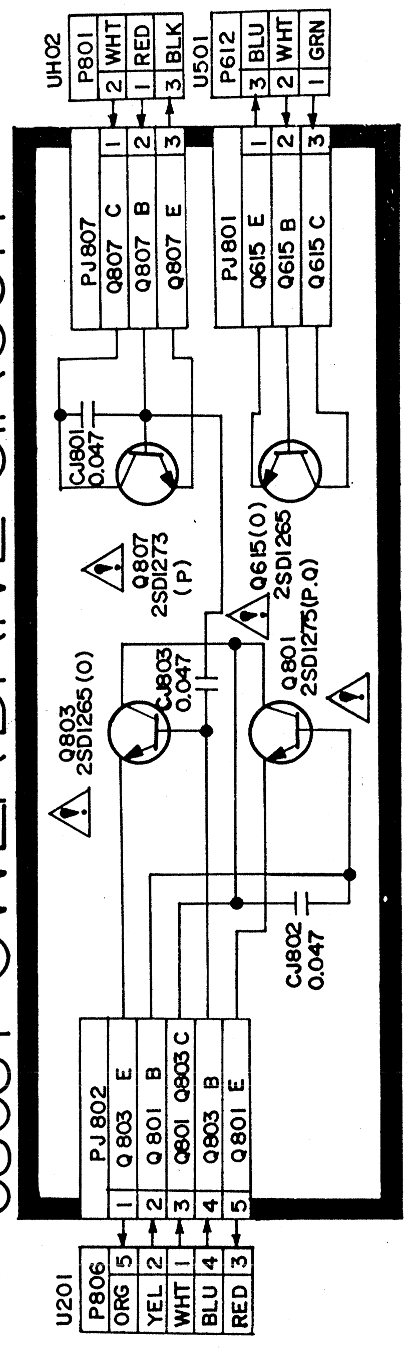
②

U201 POWER CIRCUIT


U803
RJ802
3 WHT
2 YEL
5 RED
4 BLU
1 ORG
U001
P001
1 ORG
2 BLK
3 RED
U501
P606
1 WHT
2 BLK
3 GRY
4 BLU
5 ORG
6 RED
7 PNK
8 YEL
EVER 12V
P806
Q801, Q803 C
Q801 B
Q801 E
Q803 B
Q803 E
P804
+12V
G N D
+32V
P802
MOTOR 12V
G N D
G N D
REG +5V
+5V
+12V
POWER ON (L)
MOTOR GND
TP803 ON/OFF
+5V
+5V
+12V
TP801
+12V
Q810
KTC2120Y
C808
47μ(16V)
C812
47μ(16V)
Q802
KTC1815Y
TP802
M+12V
D817
1N4148
D816
1N4148
Q804
KTC1815Y
R802
(1/2W)
3.3K
TP804
+40V
R805
(1/2W)
1.5K
C810
10μ
(50V)
R806
4.3K
R807
11K
Q806
UN4213
C816
100μ
(10V)
R816
560
D814
MA1056M
D805
MA1130M
Q811
2SC2229Y
D808
MA1200M
D809
MA1200H
C811
0.01μ
R809
1.2K
R810
1K
R811
1.8K
R808
1K
D815
MA1062M
Q805
KTC1815Y
C807
47μ
(25V)
C824
0.01μ
C823
47μ
(50V)
R804
(1/2W)
3K
C809
100μ
(100V)
R812
1.3K
R815
330
D811
MA1100H
D812
MA1130M
C821
0.1F
(5.5V)
R819
4.7K
R818
300
TP805
REG+5V
R803
(1/2W) 33Ω
D806
1S1886
C815
100μ
(35V)
C818
47μ
(50V)
D810
MA1051L
TP806
−28V
Q808
KTC1815Y
Q809
KTC1815Y
D807
1S1886
R814
(1/2W)
3.9K
R824
100K
C825
0.047
R820
4.7K
C817
47μ
100V
R821
4.7K
C822
10μ
(16V)
R813
(1/2W)
1Ω
R823
100K
D821
1N448
D818
1N4003
R825
3.9K
D820
MA1039H
R822
430
C814
3300μ
(16V)
D819
1N4148
C819
47μ
(10V)
D813
MA1062H
C813
47μ
(10V)
C820
47μ
(10V)
R817
680
C826
0.47μ
(50V)
D822
1N4148
P805
UNREG 20V
CENTER
AC 50V
AC 4V
CENTER
AC 4V
G N D
G N D
P801
Q807 B
Q807 C
Q807 E
P803
RESET 5V
AC 4V
G N D
AC CLOCK
AC 4V
REG+5V
BACK UP 5V
−28V
U802
P809
BLU 1
VLT 2
ORG 3
WHT 4
YEL 5
RED 6
BLK 7
GRY 8
UH02
PJ807
RED 2
WHT 1
BLK 3
UX01
PX01
WHT 8
YEL 7
BLK 6
GRY 5
RED 4
GRN 3
PNK 2
ORG 1

⑤

U803 POWER DRIVE CIRCUIT


UH02
P801
2 WHT
1 RED
3 BLK
U501
P612
3 BLU
2 WHT
1 GRN
PJ807
Q807 C
Q807 B
Q807 E
PJ801
Q615 E
Q615 B
Q615 C
CJ801
0.047
Q807
2SD1273
(P)
Q615(O)
2SD1265
Q803
2SD1265(O)
CJ803
0.047
Q801
2SD1275(P,Q)
CJ802
0.047
PJ802
Q803 E
Q801 B
Q801 Q803 C
Q803 B
Q801 E
U201
P806
ORG 5
YEL 2
WHT 1
BLU 4
RED 3

①

CAUTION TO THE SERVICE TECHNICIANS ; BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER TO MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.

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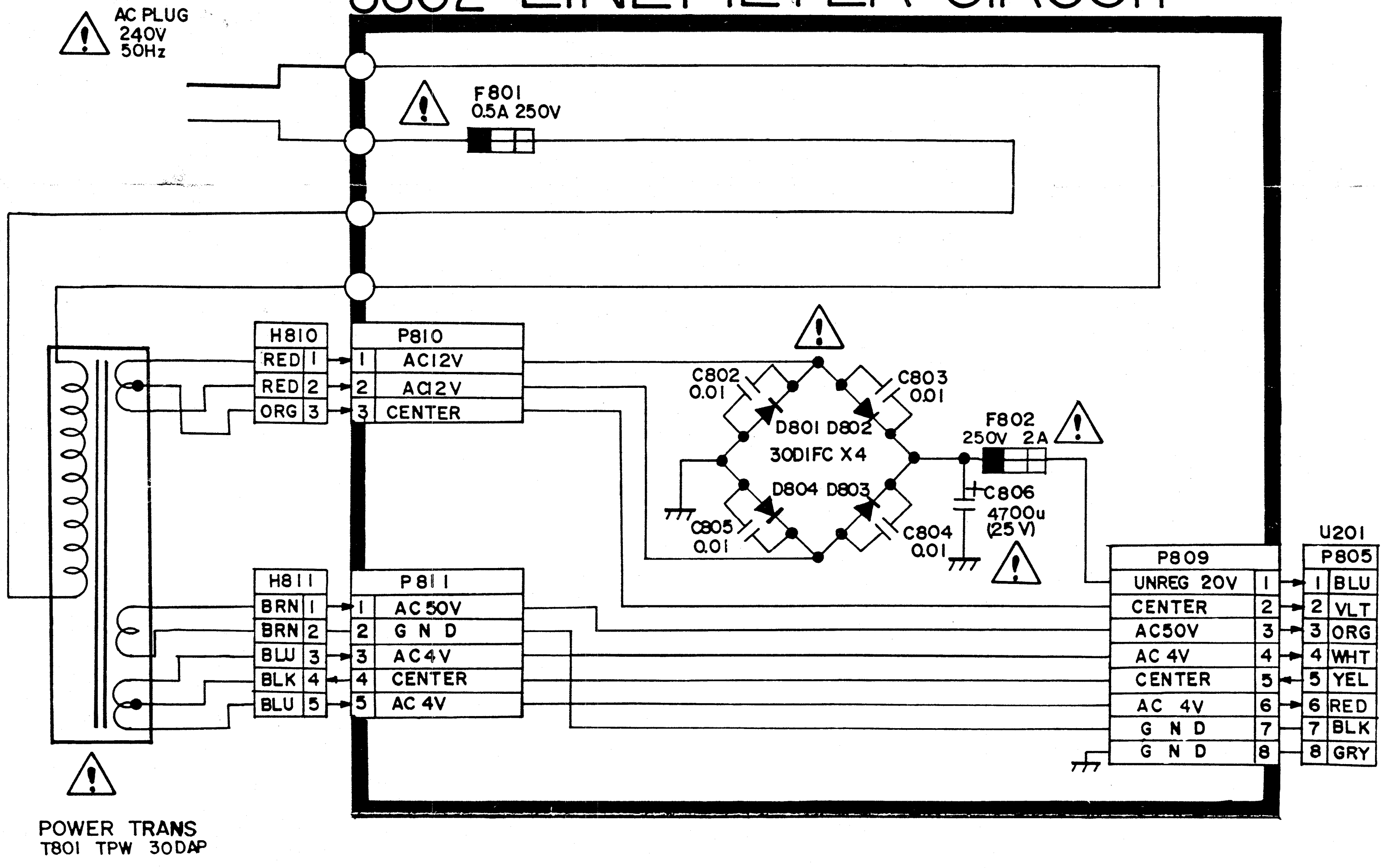
AN EXPLANATION OF THE SYMBOL

Marking Reguired	Symbol of Abbre Viation
Voltage	V
Hertz	Hz
Amperes	A
Watts	W
Fast Operating Fuse	■⊞

U802 LINEFILTER CIRCUIT



PA801
AC PLUG
240V
50Hz
F801
0.5A 250V
H810
RED 1
RED 2
ORG 3
P810
1 AC12V
2 AC12V
3 CENTER
C802
0.01
C803
0.01
D801 D802
30D1FC X4
D804 D803
C805
0.01
C804
0.01
F802
250V 2A
C806
4700u
(25V)
H811
BRN 1
BRN 2
BLU 3
BLK 4
BLU 5
P811
1 AC50V
2 G N D
3 AC4V
4 CENTER
5 AC 4V
P809
UNREG 20V 1
CENTER 2
AC50V 3
AC 4V 4
CENTER 5
AC 4V 6
G N D 7
G N D 8
U201
P805
1 BLU
2 VLT
3 ORG
4 WHT
5 YEL
6 RED
7 BLK
8 GRY
POWER TRANS
T801 TPW 30DAP

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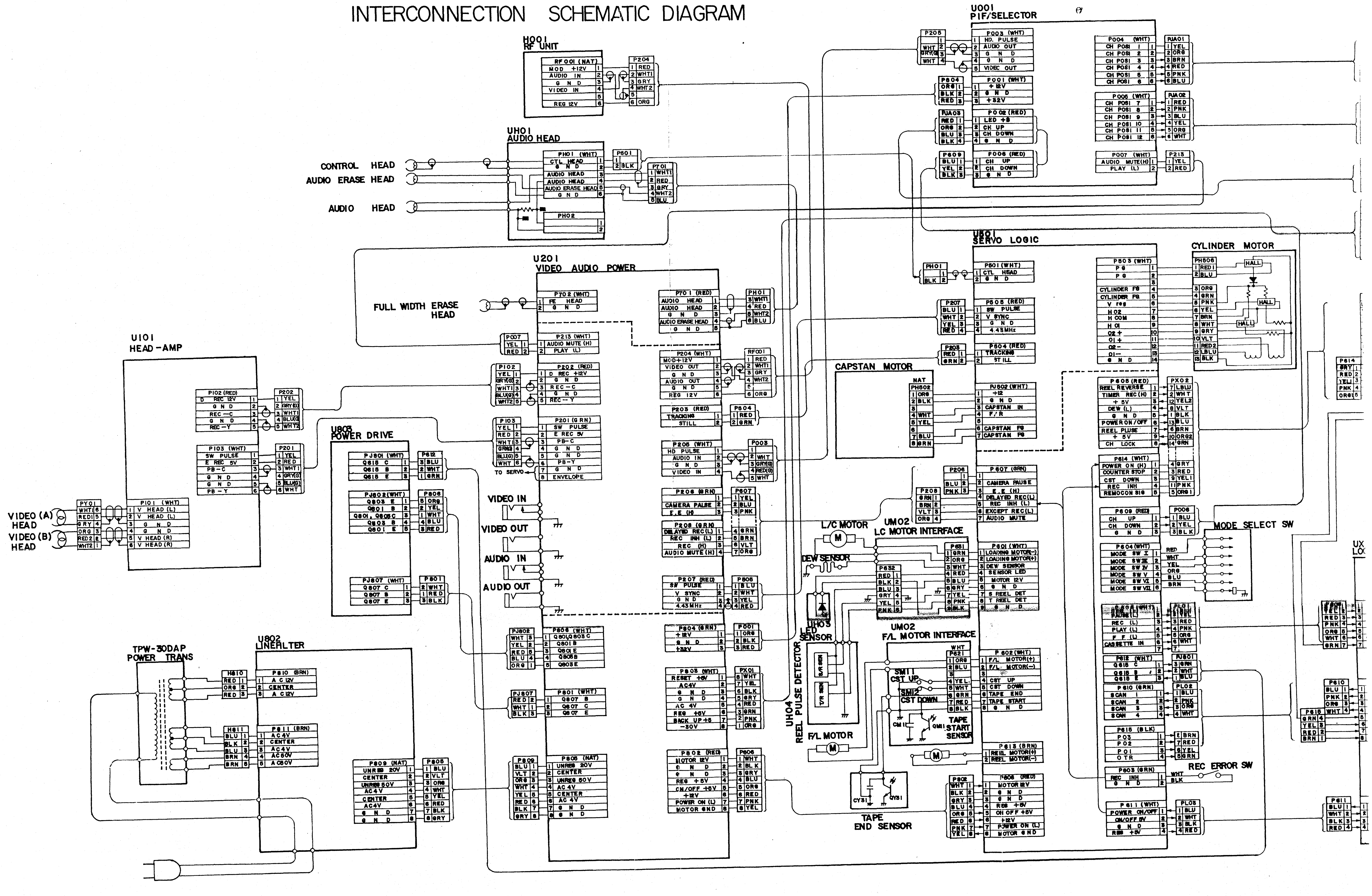
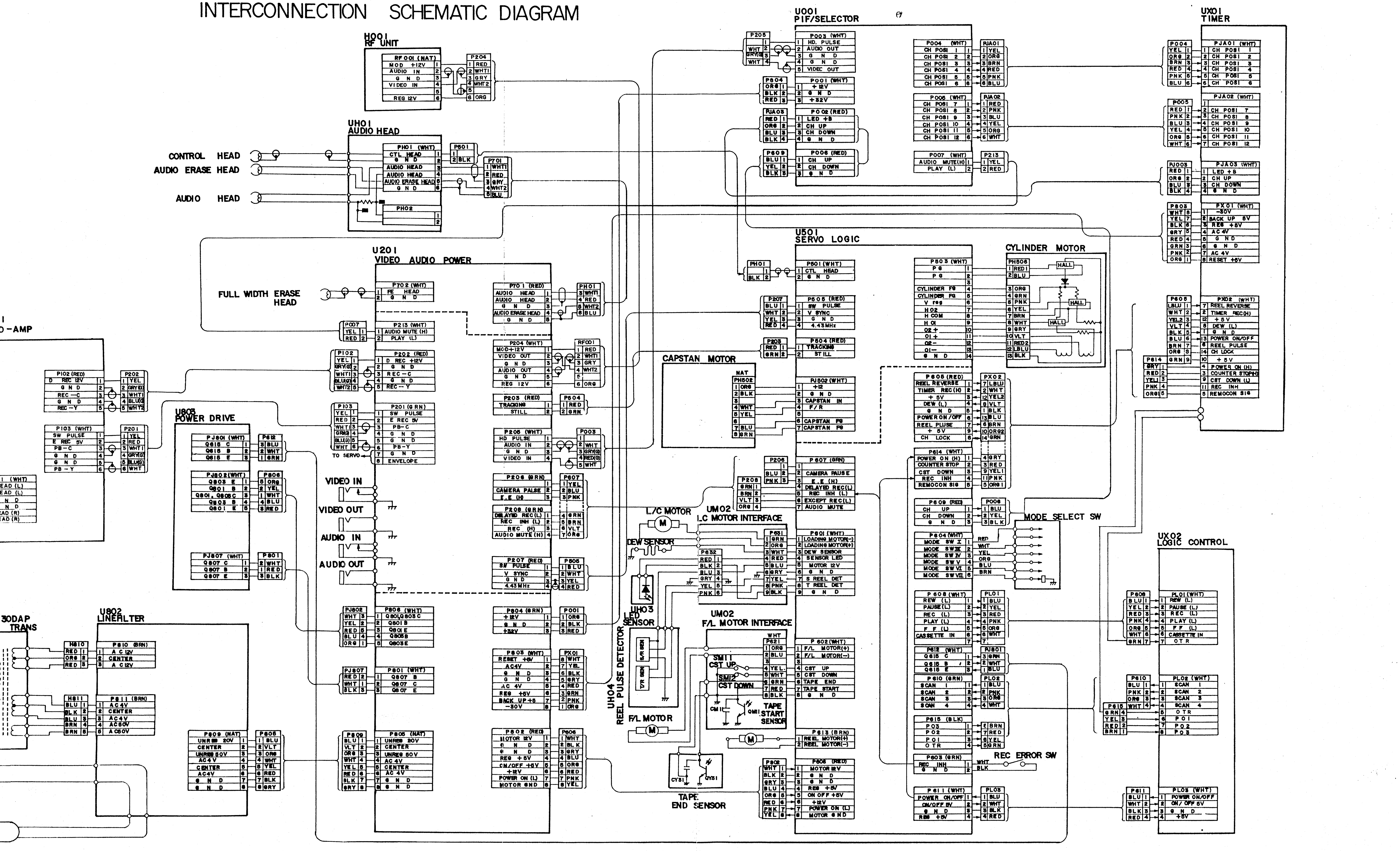
INTERCONNECTION SCHEMATIC DIAGRAM



H001
RF UNIT
UH01
AUDIO HEAD
CONTROL HEAD
AUDIO ERASE HEAD
AUDIO HEAD
U001
PIF/SELECTOR
U201
VIDEO AUDIO POWER
FULL WIDTH ERASE HEAD
U101
HEAD-AMP
VIDEO (A) HEAD
VIDEO (B) HEAD
U803
POWER DRIVE
VIDEO IN
VIDEO OUT
AUDIO IN
AUDIO OUT
TO SERVO
U802
LINEFILTER
TPW-30DAP
POWER TRANS
U801
SERVO LOGIC
CYLINDER MOTOR
HALL
CAPSTAN MOTOR
L/C MOTOR
UM02
LC MOTOR INTERFACE
DEW SENSOR
UH03
LED SENSOR
UH04
REEL PULSE DETECTOR
F/L MOTOR
UM02
F/L MOTOR INTERFACE
SM11
CST UP
SM12
CST DOWN
TAPE START SENSOR
TAPE END SENSOR
MODE SELECT SW
REC ERROR SW

VCR-30DAP
INTERCONNECTION SCHEMATIC DIAGRAM



H001 RF UNIT
RF001 (NAT)
P204
UH01 AUDIO HEAD
PH01 (WHT)
PH02
P601
P701
CONTROL HEAD
AUDIO ERASE HEAD
AUDIO HEAD
U001 PIF/SELECTOR
P205
P003 (WHT)
P604
P001 (WHT)
PJA03
P002 (RED)
P609
P006 (RED)
P004 (WHT)
PJA01
P005 (WHT)
PJA02
P007 (WHT)
P213
UX01 TIMER
PJA01 (WHT)
PJA02 (WHT)
PJA03 (WHT)
PX01 (WHT)
PX02 (WHT)
U201 VIDEO AUDIO POWER
FULL WIDTH ERASE HEAD
P702 (WHT)
P701 (RED)
P007
P213 (WHT)
P204 (WHT)
RF001
P102
P202 (RED)
P103
P201 (GRN)
TO SERVO
P203 (RED)
P205 (WHT)
P206 (GRN)
P208 (GRN)
P207 (RED)
P804 (GRN)
P803 (WHT)
P802 (RED)
VIDEO IN
VIDEO OUT
AUDIO IN
AUDIO OUT
-AMP
P102 (RED)
P103 (WHT)
U803 POWER DRIVE
PJ801 (WHT)
PJ802 (WHT)
PJ807 (WHT)
P612
P606
P801
PJ802
P806 (WHT)
PJ807
P801 (WHT)
P809
P808 (NAT)
P809 (NAT)
P805
30DAP TRANS
U802 LINEFILTER
H810
P810 (BRN)
H811
P811 (BRN)
U501 SERVO LOGIC
PH01
P501 (WHT)
P207
P505 (RED)
P203
P504 (RED)
CAPSTAN MOTOR
PH502
PJ502 (WHT)
P206
P208
P607 (GRN)
L/C MOTOR
DEW SENSOR
UM02 L/C MOTOR INTERFACE
P631
P632
P601 (WHT)
UH03 LED SENSOR
UH04 REEL PULSE DETECTOR
UM02 F/L MOTOR INTERFACE
P621
SM11 CST UP
SM12 CST DOWN
TAPE START SENSOR
F/L MOTOR
P602 (WHT)
P613 (BRN)
TAPE END SENSOR
P802
P605 (RED)
CYLINDER MOTOR
PH506
HALL
P503 (WHT)
P605 (RED)
PX02
P614 (WHT)
P609 (RED)
P006
MODE SELECT SW
P604 (WHT)
P608 (WHT)
PL01
P612 (WHT)
PJ801
P610 (GRN)
PL02
P615 (BLK)
P603 (GRN)
REC ERROR SW
P611 (WHT)
PL03
UX02 LOGIC CONTROL
P608
PL01 (WHT)
P610
P615
PL02 (WHT)
P611
PL03 (WHT)

1. Normal

Type	
Code	Type
A	Aluminum
B	Barrier Layer
C	Ceramic
E	Electrolytic
L	Line Across
M	Mylar
S	Styrol
N	Metalized Polyester
Q	Mica
O	Oil
T	Tantal

Distance
(Same as
Fixed
Resistor)

Shape
or
Characteristic

Voltage	
Code	Voltage
0J	6.3V
1A	10V
1C	16V
1D	20V
1E	25V
1V	35V
1G	40V
1H	50V
1J	63J
2A	100V
2B	125V
2C	160V
2D	200V
2E	250V
2F	315V

Value
(Same as Fixed
Resistor)

(Same as Fixed
Resistor)

2. Temperature Compensation

Distance
(Same as Fixed
Resistor)

Characteristic			
Capacitance Coefficient (ppm/°C)		Temperature Coefficient (ppm/°C)	
A	+100	F	±15
B	+30	G	±30
C	0	H	±60
H	−30	J	±120
L	−80	K	±250
P	−150	L	±500
R	−220	M	±1000
S	−330	N	±2500
T	−470		
U	−750		
V	−1000		
SL	+350 ~ −1000		

Voltage
(Same as Normal)

Value
(Same as Fixed Resistor)

Tolerance
(Same as Fixed Resistor)

Regulation

Type	
F	Fiber
G	Glass Tube
L	Lead Type Glass Tube
T	Temperature
W	Wire
C	Ceramic
P	Plastic

Size		
A	MF41	4.6×16
B	MF51	5.2×20
C	MF60	6.3×30
D	MF61	6.3×31.8
E	MF01	10.3×38.1
F	MF04	14.3×50.8
G	MF05	20.6×76.2

Value
(Same as Fixed Resistor)

Voltage	
1	AC125V
2	AC250V
3	125/250V

Characteristics

6-2. ELECTRICAL PART LIST BY ASSEMBLIES

6-2-1 Video-Audio-Power PCB Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
C201		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C202		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C203		CEXE1H229A	C ELECTRO	50V 2.2MF RS=5×11 TAPING
C204		CEXE1E479A	C ELECTRO	25V 4.7MF RS TAPING
C205		CEXE1E339A	C ELECTRO	25V 3.3MF RS TAPING
C206		CEXE1H229A	C ELECTRO	50V 2.2MF RS=5×11 TAPING
C207		CXSL1H101J	C CERA	SL 50V 100 PF J TAPING
C208		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C209		CCXB1H102K	C CERA	HIKB 50V 1000PF K TAPING
C210		CXSL1H471J	C CERA	SL 50V 470PF J TAPING
C211		CXSL1H271J	C CERA	SL 50V 270PF J TAPING
C212		CEXE1V338A	C ELECTRO	35V 0.33MF SM
C213		CXSL1H050C	C CERA	SL 50V 5 PF C
C214		CXSL1H101J	C CERA	SL 50V 100 PF J TAPING
C215		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C216		CXCH1H390J	C CERA	CH 50V 39PF J TAPING
C217		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C218		CEXE1A101A	C ELECTRO	10V 100MF RS 6.3×11 TAPING
C220		CBBL1E473K	C BARRIER	25V 0.047MF K LAYER
C221		CMBM1H223J	C MYLAR	50V 0.022MF J
C222		CXSL1H331J	C CERA	SL 50V 330PF J TAPING
C223		CCXF1H473Z	C CERA	HIKF 50V 0.047MF Z TAPING
C231		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C232		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C233		CXSL1H821J	C CERA	50V SL 820PF J R/T
C234		CXSL1H221J	C CERA	SL 50V 220PF J TAPING
C235		CXSL1H680J	C CERA	SL 50V 68PF J TAPING
C236		CXSL1H151J	C CERA	SL 50V 150PF J TAPING
C237		CXSL1H681J	C CERA	SL 50V 680PF J TAPING
C238		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C239		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C240		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C241		CCXF1H473Z	C CERA	HIKF 50V 0.047MF Z TAPING
C242		CEXE1E339A	C ELECTRO	25V 3.3MF RS TAPING
C243		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C244		CXCH1H220J	C CERA	CH 50V 22PF J TAPING
C245		CXSL1H330J	C CERA	SL 50V 33PF J TAPING
C246		CXCH1H220J	C CERA	CH 50V 22PF J TAPING
C248		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C249		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C250		CXSL1H390J	C CERA	SL 50V 39PF J TAPING
C251		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C252		CXSL1H120J	C CERA	SL 50V 12PF J TAPING
C253		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C254		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C255		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C256		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C257		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C258		CEXXE0J101A	C ELECTRO	6.3V 100MF RS6.3×11 TAPING
C259		CCXF1H473Z	C CERA	HIKF 50V 0.047MF Z TAPING
C260		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C261		CEXE1A471A	C ELECTRO	10V 470MF 10×16
C262		CEXE1C101A	C ELECTRO	16V 100MF RS=8×11.5 TAPING
C263		CEXE1C470A	C ELECTRO	16V 47MF RS=6.3×11 TAPING
C265		CXCH1H330J	C CERA	CH 50V 33PF J TAPING
C266		CXSL1H330J	C CERA	SL 50V 33PF J TAPING
C267		CXCH1H330J	C CERA	CH 50V 33PF J TAPING
C271		CEXE1C101A	C ELECTRO	16V 100MF RS=8×11.5 TAPING
C281		CMBM1H392J	C MYLAR	50V 0.0039MF J
C282		CXSL1H221J	C CERA	SL 50V 220PF J TAPING
C283		CMBM1H432J	C MYLAR	50V 0.0043MF J
C284		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C285		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C401		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C402		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C403		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C404		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C405		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C406		CXSL1H471J	C CERA	SL 50V 470PF J TAPING
C407		CXSL1H270J	C CERA	SL 50V 27PF J TAPING
C408		CCXB1H102K	C CERA	HIKB 50V 1000PF K TAPING
C409		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C410		CBBL1E104K	C BARRIER LAYER	25V 0.1MF K
C411		CCXB1H102K	C CERA	HIKB 50V 1000PF K TAPING
C412		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C413		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
C414		CMBM1H223J	C MYLAR	50V 0.022MF J
C415		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C416		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C417		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C420		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C421		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C422		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C423		CXCH1H150J	C CERA	CH 50V 15PF J TAPING
C424		CXCH1H809C	C CERA	CH 50V 8PF C TAPING
C425		CMBM1H102J	C MYLAR	50V 0.001MF J INDUCT
C426		CXSL1H309C	C CERA	SL 50V 3PF C
C427		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C428		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING

LOC	A/J	PART CODE	PART NAME	PART DESC
C429		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C430		CCXB1H472K	C CERA	HIKB 50V 4700PF K TAPING
C431		CXSL1H470J	C CERA	SL 50V 47PF J TAPING
C432		CCXB1H102K	C CERA	HIKB 50V 1000PF K TAPING
C433		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C434		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C435		CMBC1H473J	C MYLAR	50V 0.047MF J N-INDUCTOR
C436		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C437		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C438		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C439		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C443		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C451		97P7600900	C TRIMMER	CT5-N-20 20PF
C461		CXSL1H390J	C CERA	SL 50V 39PF J TAPING
C462		CXSL1H471J	C CERA	SL 50V 470PF J TAPING
C464		CNBN1H154J	C MYLAR	50V 0.15MF K MP-P N-INDUC
C465		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C466		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C467		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C701		CCXF1H102Z	C CERA	HIKF 50V 1000PF Z TAPING
C702		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C703		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C704		CEXE1C330A	C ELECTRO	16V 33MF RS 5×11 TAPING
C705		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C706		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C707		CMXM1H183J	C MYLAR	50V 0.018MF J
C708		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C709		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C711		CMXM1H223J	C MYLAR	50V 0.022MF J
C712		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C713		CEXE1A101A	C ELECTRO	10V 100MF RS 6.3×11 TAPING
C714		CEXE1C330A	C ELECTRO	16V 33MF RS 5×11 TAPING
C715		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C716		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C717		CMXM1H103J	C MYLAR	50V 0.01MF J
C718		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
C719		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
C720		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C721		CCXB1H821K	C CERA	HIKB 50V 820PF K TAPING
C722		CCXB1H472K	C CERA	HIKB 50V 4700PF K TAPING
C723		CMXM1H682J	C MYLAR	50V 0.0068MF J
C724		CEXE1C470A	C ELECTRO	16V 47MF RS=6.3×11 TAPING
C725		CCXB2H221K	C CERA	HIKB 500V 220PF K TAPING
C726		CMYB1H473J	C MYLAR	50V 0.047MF J (N-INDUCT)
C727		CEXE1C101A	C ELECTRO	16V 100MF RS=8×11.5 TAPING
C728		CCXB1H153K	C CERA	HIKB 50V 0.015MF K
C730		CCXB1H821K	C CERA	HIKB 50V 820PF K TAPING

LOC	A/J	PART CODE	PART NAME	PART DESC
C807		CEXE1E470A	C ELECTRO	25V 47MF RS=6.3×11 TAPING
C808		CEXE1C470A	C ELECTRO	16V 47MF RS=6.3×11 TAPING
C809		CEBE2A1010	C ELECTRO	100V 100MF RS (VENT CAP)
C810		CEXE1H100A	C ELECTRO	50V 10MF RS 5×11 TAPING
C811		CCXF11H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C812		CEXE1C470A	C ELECTRO	16V 47MF RS=6.3×11 TAPING
C813		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C814		CEBE1C3320	C ELECTRO	16V 3300MF SM (VENT CAP)
C815		CEBE1V101A	C ELECTRO	35V 100MF RS
C816		CEXE1A101A	C ELECTRO	10V 100MF RS 6.3×11 TAPING
C817		CEBE2A470A	C ELECTRO	100V 47MF RS
C818		CEXE1H470A	C ELECTRO	50V 47MF 8×11.5 RS TAPING
C819		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C820		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C821		CDYF0H104K	C GOLD	5.5V 0.1F F TYPE
	A	CDBE0H104K	C SUPER	5.5V 0.1F FZ
C822		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C823		CEBE1H470A	C ELECTRO	50V 47MF SM
C824		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C825		CCXF1H473Z	C CERA	HIKF 50V 0.04MF Z TAPING
C826		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
D201		DZN14148---	DIODE	1N4148 (AUTO)
D202		DZN4148---	DIODE	1N4148 (AUTO)
D281		DZN4148---	DIODE	1N4148 (AUTO)
D282		DZN4148---	DIODE	1N4148 (AUTO)
D283		DZN4148---	DIODE	1N4148 (AUTO)
D401		DZN4148---	DIODE	1N4148 (AUTO)
D402		DZN4148---	DIODE	1N4148 (AUTO(
D404		DZN4148---	DIODE	1N4148 (AUTO)
D805		DZN1130M--	DIODE ZENER	MA 1130M (13V)
D806		D1N4004---	DIODE	1N4004
D807		D1N4004---	DIODE	1N4004
D808		DZA1200M--	DIODE ZENER	MA 12000M (20V)
D809		DZA1200H--	DIODE ZENER	MA 1200H (20V)
D810		DZA105R1L-	DIODE ZENER	MA 1051L (5R1)
D811		DZA1100H--	DIODE ZENER	MA 1100H (10V)
D812		DZA1130M--	DIODE ZENER	MA 1130M (13V)
D813		DZA106R2H-	DIODE ZENER	MA 1062H (6R2)
D814		DZA105R6M-	DIODE ZENER	MA 1956M (5R6)
	A	DZZ5R6BM--	DIODE ZENER	DZ 5.6BM (AUTO)
D815		DZA106R2M-	DIODE ZENER	MA 1062M (6M2)
D816		DZN4148---	DIODE	1N4148 (AUTO)
D817		DZN4148---	DIODE	1N4148 (AUTO)
D818		D1N4003---	DIODE	1N4003
D819		DZN4148---	DIODE	1N4148 (AUTO)
D820		DZA103R9H-	DIODE ZENER	MA 1039H (3R9)
	A	DZZ3R9B---	DIODE ZENER	DZ 3R9B (3R9) (AUTO)

LOC	A/J	PART CODE	PART NAME	PART DESC
D821		DZN4148---	DIODE	1N4148 (AUTO)
D822		DZN4148---	DIODE	1N4148 (AUTO)
IC201		1AN3211K--	IC	AN321K Y-REC
IC202		1AN3320K--	IC	AN3320K Y-PB
IC401		1AN6367K--	IC	AN6367K CHROMA PROCESS
IC402		1MN6163A--	IC	MN6163A CHROMA
IC701		1UPC1513HA	IC	UPC1513HA
IC702		1BA5115---	IC	BA5115
L201		56Z101J113	COIL PEAKING	TRF-4101J
L202		56Z101J113	COIL PEAKING	TRF-4101J
L205		56Z121J024	COIL PEAKING	TRF-4121J
L206		56Z680J029	COIL PEAKING	TRF-4680J
L207		56Z151J117	COIL PEAKING	TRF-4151J
L208		56Z680J029	COIL PEAKING	TRF-4680J
L209		56Z151J117	COIL PEAKING	TRF-4151J
L210		56Z101J113	COIL PEAKING	TRF-4101J
L281		56Z101J113	COIL PEAKING	TRF-4101J
L401		56Z150J016	COIL PEAKING	TRF-4150J
L402		56Z101J113	COIL PEAKING	TRF-4101J
L403		56Z151J117	COIL PEAKING	TRF-4151J
L404		56Z270J039	COIL PEAKING	TRF-4270J
L405		56Z101J113	COIL PEAKING	TRF-4101J
L406		56Z680J029	COIL PEAKING	TRF-4680J
L407		56Z101J113	COIL PEAKING	TRF-4101J
L408		56Z681J131	COIL PEAKING	TRF-4681J
L409		56Z681J131	COIL PEAKING	TRF-4681J
L410		56Z2331J012	COIL PEAKING	TRF-4331J
L701		56Z682J335	COIL PEAKING	EL0607RA-682J (AUTO)
L702		56Z471J013	COIL PEAKING	TRF-4471J
P201		97P62125GR	CONN WAFER	W-P0808-55 8P GREEN
P202		97P62122RD	CONN WAFER	W-P0805-52 5P RED
P203		97P62119RD	CONN WAFER	W-P0802-52 2P RED
P204		97P62123WH	CONN WAFER	W-P0806-51 6P WHITE
P205		97P62121WH	CONN WAFER	W-P0804-51 4P WHITE
P206		97P62120BK	CONN WAFER	W-P0803-50 3P BLACK
P207		97P62121RD	CONN WAFER	W-P0804-52 4P RED
P208		97P62121GR	CONN WAFER	W-P0804-55 4P GREEN
P209		97P63001BO	PHONO JACK	S-Q3096-04 YELLON
P210		97P63002BO	PHONO JACK	S-Q3097-04 YELLOW
P211		97P63001KO	PHONO JACK	S-Q3096-02 RED
P212		97P63002KO	PHONO JACK	S-Q3097-02 RED
P701		97P62122RD	CONN WAFER	W-P0805-52 5P RED
P702		97P62119WH	CONN WAFER	W-P0802-51 2P WHITE
P801		97P62120WH	CONN WAFER	W-P0803-51 3P WHITE
P802		97P62125RD	CONN WAFER	W-P0808-52 8P RED
P803		97P62125WH	CONN WAFER	W-P0806-51 8P WHITE
P804		97P62120GR	CONN WAFER	W-P0803-55 3P GREEN

LOC	A/J	PART CODE	PART NAME	PART DESC
P805		47P65024LO	CONN WAFER	W-P9008-51 8P BROWN
P806		97P62122WH	CONN WAFER	W-P0805-51 5P WHITE
Q201		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q202		TUN4213---	TR	UN4213
Q204		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q205		TKTA562Y--	TR	KTA562Y
Q206		TKTA562Y--	TR	KTA562Y
Q207		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q208		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q209		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q210		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q281		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q282		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q283		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q284		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q285		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q401		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q403		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q404		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q405		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q406		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q408		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q411		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q413		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q414		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q415		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q416		TZTC115Y-	TR	KTC1815-Y (AUTO)
Q701		TKTC1959Y-	TR	KTC1959-Y
Q802		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q804		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q805		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q806		TUN4213---	TR	UN4213
Q808		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q809		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q810		TKTC2120Y-	TR	KTC2120Y
Q811		TKTC2229Y-	TR	KTC2229-Y
R201		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R202		RD-AZ750J-	R CARBON FILM	1/6 75 OHM J
R203		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R204		RD-AZ824J-	R CARBON FILM	1/6 820K OHM J
R205		RD-AZ824J-	R CARBON FILM	1/6 820K OHM J
R206		RD-AZ681J-	R CARBON FILM	1/6 680 OHM J
R207		RD-AZ391J-	R CARBON FILM	1/6 390 OHM J
R208		RD-AZ391J-	R CARBON FILM	1/6 390 OHM J
R209		RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R210		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R211		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R212		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R213		RD-AZ462J-	R CARBON FILM	1/6 5.6K OHM J
R214		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R215		RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R216		RD-AZ132J-	R CARBON FILM	1/6 1.3K OHM J
R217		RD-AZ203J-	R CARBON FILM	1/6 20K OHM J
R218		RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
R221		RV5417203M	R SEMI FIXED	20K OHM B H-TYPE
R222		RV5417203M	R SEMI FIXED	20K OM B H-TYPE
R223		RV5417103M	R SEMI FIXED	10K OHM B H-TYPE
R224		RV5417103M	R SEMI FIXED	10K OHM B H-TYPE
R225		RV5417203M	R SEMI FIXED	20K OHM B H-TYPE
R228		RV5417502M	R SEMI FIXED	5K OHM B H-TYPE
R229		RV5417503M	R SEMI FIXED	50K OHM B H-TYPE
R231		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R232		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R233		RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R234		RD-AZ271J-	R CARBON FILM	1/6 270 OHM J
R235		RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R236		RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R237		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R238		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R239		RD-AZ121J-	R CARBON FILM	1/6 120 OHM J
R240		RD-AZ151J-	R CARBON FILM	1/6 150 OHM J
R241		RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R242		RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R243		RD-AZ471J-	R CARBON FILM	1/6 470 OHM J
R244		RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R245		RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R246		RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R247		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R248		RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J
R249		RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J
R250		RD-AZ391J-	R CARBON FILM	1/6 390 OHM J
R251		RD-AZ391J-	R CARBON FILM	1/6 390 OHM J
R252		RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
R253		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R261		RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R262		RD-AZ681J-	R CARBON FILM	1/6 680 OHM J
R263		RD-AZ751J-	R CARBON FILM	1/6 750 OHM J
R264		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R265		RD-AZ750J-	R CARBON FILM	1/6 75 OHM J
R266		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R267		RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R271		RD-AZ681J-	R CARBON FILM	1/6 680 OHM J
R272		RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R273		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R274		RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R275		RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
R276		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R277		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R278		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R281		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R282		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R283		RD-AZ333J-	R CARBON FILM	126 33K OHM J
R284		RD-AZ513J-	R CARBON FILM	1/6 51K OHM J
R285		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R286		RD-AZ683J-	R CARBON FILM	1/6 68K OHM J
R287		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R288		RD-AZ823J-	R CARBON FILM	1/6 82K OHM J
R289		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R290		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R291		RD-AZ563J-	R CARBON FILM	1/6 56K OHM J
R292		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R293		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R401		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R402		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R403		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R404		RD-AZ431J-	R CARBON FILM	1/6 430 OHM J
R405		RD-AZ271J-	R CARBON FILM	1/6 270 OHM J
R406		RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J
R407		RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
R408		RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
R409		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R410		RD-AZ471J-	R CARBON FILM	1/6 470 OHM J
R411		RD-AZ470J-	R CARBON FILM	1/6 47 OHM J
R412		RD-AZ183J-	R CARBON FILM	1/6 18K OHM J
R413		RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
R414		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R415		RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R416		RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R418		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R419		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R420		RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
R421		RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R422		RD-AZ431J-	R CARBON FILM	1/6 430 OHM J
R424		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R425		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R426		RD-AZ105J-	R CARBON FILM	1/6 1M OHM J
R427		RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
R428		RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
R429		RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R431		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R432		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R433		RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
R434		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
R435		RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
R437		RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R438		RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R439		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R440		RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
R441		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R442		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R443		RD-AZ912J-	R CARBON FILM	1/6 9.1K OHM J
R444		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R445		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R446		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R447		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R448		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R449		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R450		RD-AZ132J-	R CARBON FILM	1/6 1.3K OHM J
R451		RV5417502M	R SEMI FIXED	5K OHM B H-TYPE
R452		RV5417203M	R SEMI FIXED	20K OHM B H-TYPE
R460		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R461		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R462		RD-AZ470J-	R CARBON FILM	1/6 47 OHM J
R463		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R464		RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R465		RD-AZ2821J-	R CARBON FILM	1/6 820 OHM J
R466		RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R467		RD-AZ390J-	R CARBON FILM	1/6 39 OHM J
R468		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R469		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R471		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R472		5V1104004B	VR ROTATY	K121K0G-100KB
R473		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R701		RD-AZ573J-	R CARBON FILM	1/6 56K OHM J
R702		RD-AZ132J-	R CABRON FILM	1/6 1.3K OHM J
R703		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R704		RD-AZ684J-	R CARBON FILM	1/6 680K OHM J
R705		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R706		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R708		RD-AZ563J-	R CARBON FILM	1/6 56K OHM J
R709		RD-AZ621J-	R CARBON FILM	1/6 620 OHM J
R710		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R711		RD-AZ683J-	R CARBON FILM	1/6 68K OHM J
R712		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R713		RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
R714		RD-AZ121J-	R CARBON FILM	1/6 120 OHM J
R715		RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
R716		RD-AZ153J-	R CARBON FILM	1/6 15K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R717		RD-AZ302J-	R CARBON FILM	1/6 3K OHM J
R719		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R720		RD-AZ151J-	R CARBON FILM	1/6 150 OHM J
R721		RD-AZ224J-	R CARBON FILM	1/6 220K OHM J
R722		RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
R724		RD-AZ301J-	R CARBON FILM	1/6 300 OHM J
R727		RD-AZ330J-	R CARBON FILM	1/6 33 OHM J
R731		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R732		RD-AZ153J-	R CARBONFILM	1/6 15K OHM J
R733		RV5417203M	R SEMI FIXED	20K OHM B H-TYPE
R734		RV5417204M	R SEMI FIXED	200K OHM B H-TYPE
R735		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R802		RS-2F332JF	R M-OXIDE FILM	1/2 3.3K OHM J FL-PR
R803		RF-2F330J-	R FUSIBLE	1/2W 33 OHM J
R804		RS-2F302JF	R M-OXIDE FILM	1/2 3K OHM J FL-PR
R805		RS-2F152JF	R M-OXIDE FILM	1/2 1.5K OHM J FL-PR
R806		RD-AZ432J-	R CARBON FILM	1/64.3K OHM J
R807		RD-AZ113J-	R CARBON FILM	1/6 11K OHM J
R808		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R809		RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J
R810		RV5417102M	R SEMI FIXED	1K OHM B H-TYPE
R811		RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R812		RD-AZ132J-	R CARBON FILM	1/6 1.3K OHM J
R813		RF-2E109J-	R FUSIBLE	1/2 1 OHM J
R814		RS-2F392JF	R M-OXIDE FILM	1/2 3.9K OHM J FL-PR
R815		RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R816		RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
R817		RD-AZ681J-	R CARBON FILM	1/6 680 OHM J
R818		RD-AZ301ZJ-	R CARBON FILM	1/6 300 OHM J
R819		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R820		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R821		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R822		RD-AZ431J-	R CARBON FILM	1/6 430 OHM J
R823		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R824		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R825		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
T701		57AK000027	TRANS OSC	DEO-003
U201		97P6515600	PCB VIDEO-AUDIO-PWR	318×162 T=1.6
V202		97P2410000	BRAKET A/V INP/JACK	SPCC T=0.6 SNMC
V203		47P15029--	HOLDER WIRE-C	NYLON 66
V204		97P2501300	GUIDE VIDEO PCB	DUROCON M270
V205A		97P438100	A/V INPUT HOLDER	VCR-50 DAU
V205B		97P2309700	HOLDER A/V INPUT	HI-PS

LOC	A/J	PART CODE	PART NAME	PART DESC
V205C		97P0910000	PLATE A/V IN HLD-A	PVC T=0.3
V205D		97P0910100	PLATE A/V IN HLD-B	PVC T=0.3
V206		97P3012000	SPRING VIDEO EARTH	PBSP T=0.1
V207		7124301011	SCREW TAPPING	T2S RND 3×10 MFZN
V208		7124300811	SCREW TAPPING	T2S RND 3×8 MFZN

LOC	A/J	PART CODE	PART NAME	PART DESC
V209		97P2409500	BRAKET VIDEO PCB	SECC T=1.2
V218		97P6300100	JACK REMOCON	SE-053-1
W311		97P8812400	WIRE SHI AS-VI (#311)	1691AWG27 7/0.16 RED
X201		97P7001500	DELAY LINE	ADL-CP1245
X401		97P7001600	DELAY LINE	ADL-SE1844
X402		5P4R43HC49	CRYSTAL	4.43MHZ
Z201		5PDLP1005-	FILTER LC	DLP1005 3.0 MHZ
Z401		5PDBLP1006	FILTER LC	DBLP1006 4.43MHZ, 1.6MHz
Z402		5PDB1007-	FILTER LC	DBP1007 5.06MHZ

6-2-2 Servo-Logic PCB Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
C501		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C504		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C505		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C506		CMXM1H223J	C MYLAR	50V 0.022MF J
C507		CMXM1H223J	C MYLAR	50V 0.022MF J
C508		CMYL1H274J	C MYLAR	50V 0.27MF J MEU
C509		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C510		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C511		CMXM1H273J	C MYLAR	50V 0.027 MF J
C512		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C513		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C514		CEXE1C470A	C ELECTRO	16V 47MF RS=6.3×11 TAPING
C516		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C517		CMXM1H472J	C MYLAR	50V 0.0047MF J
C518		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C519		CEXE1A221A	C ELECTRO	10V 220MF RS 8×11.5 TAPING
C520		CMBM1H104J	C MYLAR	50V 0.1MF J
C521		CMXM1H562J	C MYLAR	50V 5600PF J
C522		CMXM1H223J	C MYLAR	50V 0.022MF j
C523		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C524		CMBM1H104J	C MYLAR	50V 0.1MF J
C525		CMBM1H562J	C MYLAR	50V 5600PF J INDUCTIVE
C526		CCXF1H102Z	C CERA	HIKF 50V 1000PF Z TAPING
C527		CEXE1H109F	C ELECTRO	50V 1MF SM N-POLA
C528		CEXE1A220A	C ELECTRO	10V 22MF RS 5×11 TAPING
C529		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C530		CMXM1H223J	C MYLAR	50V 0.022MF J
C531		CMXM1H223J	C MYLAR	50V 0.022MF J
C532		CMXM1H223J	C MYLAR	50V 0.022MF J
C533		CMBM1H104J	C MYLAR	50V 0.1MF J
C534		CMXM1H152J	C MYLAR	50V 1500 PF J

LOC	A/J	PART CODE	PART NAME	PART DESC
C535		CEXE1h109F	C ELECTRO	50V 1MF SM N-POLA
C536		CEXE1H109A	C ELECTRO	50V 1MF RS=5×11 TAPING
C537		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C601		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C602		CCXB1H221K	C CERA	HIKB 50V 220PF K TAPING
C603		CCXB1H221K	C CERA	HIKB 50V 220PF K TAPING
C604		CMYL1H104J	C MYLAR	50V 0.1MF J MEU
C605		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C606		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C607		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C608		CEXE1E339F	C ELECTRO	25V 3.3MF RS N-POLA
C610		CEXE1H100A	C ELECTRO	50V 10MF RS 5×11 TAPING
C611		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C612		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C613		CEXE1C470A	C ELECTRO	16V 47MF RS=6.3×11 TAPING
C614		CMYL1H104J	C MYLAR	50V 0.1MF J MEU
C615		CEXE1E479A	C ELECTRO	25V 4.7MF RS TAPING
C616		CCXB1H222K	C CERA	HIKB 50V 2200PF K TAPING
C617		CCXB1H222K	C CERA	HIKB 50V 2200PF K TAPING
C618		CMXM1H103J	C MYLAR	50V 0.01MF J
C619		CXCH1H270J	C CERA	CH 50V 27PF J TAPING
C620		CXCH1H509C	C CERA	CH 50V 5PF C TAPING
C621		CEXE1A470A	C ELECTRO	10V 47MF 5×11 RS TAPING
C622		CCXF1H104Z	C CERA	HIKF 50V 0.1MF Z TAPING
C623		CEXE1C100A	C ELECTRO	16V 10MF RS=5×11 TAPING
C624		CCXF1H473Z	C CERA	HIKF 50V 0.047MF Z TAPING
C625		CEXE1A479A	C ELECTRO	10V 4.7MF RS TAPING
C627		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C628		CEBE1E220A	C ELECTRO	25V 22MF SM
C629		CEBE1E479A	C ELECTRO	25V 4.7UF SM
C630		CEBE1A471A	C ELECTRO	10V 470MF SM

LOC	A/J	PART CODE	PART NAME	PART DESC
D503		DZN4148---	DIODE	1N4148 (AUTO)
D504		DZN4148---	DIODE	1N4148 (AUTO)
D505		DZN4148---	DIODE	1N4148 (AUTO)
D506		DZN4148---	DIODE	1N4148 (AUTO)
D508		DZN4148---	DIODE	1N4148 (AUTO)
D509		DZN4148---	DIODE	1N4148 (AUTO)
D601		D1SS176---	DIODE	1SS176
D602		D1SS176---	DIODE	1SS176
D603		DZN4148---	DIODE	1N4148 (AUTO)
D604		DZN4148---	DIODE	1N4148 (AUTO)
D605		DZN4148---	DIODE	1N4148 (AUTO)
D606		DZN4148---	DIODE	1N4148 (AUTO)
D607		DZN4148---	DIODE	1N4148 (AUTO)
D608		DZN4148---	DIODE	1N4148 (AUTO)
D609		D1N4003---	DIODE	1N4003
D611		DZN4148---	DIODE	1N4148 (AUTO)
D612		D1SS176---	DIODE	1SS176
D613		D1SS176---	DIODE	1SS176
D614		D1SS176---	DIODE	1SS176
D615		D1SS176---	DIODE	1SS176
D616		D1SS176---	DIODE	1SS176
D617		DZN4148---	DIODE	1N4148 (AUTO)
D618		DZN4148---	DIODE	1N4148 (AUTO)
D619		DZN4148---	DIODE	1N4148 (AUTO)
D620		DZN4148---	DIODE	1N4148 (AUTO)
D621		DZN4148---	DIODE	1N4148 (AUTO)
D622		DZN4148---	DIODE	1N4148 (AUTO)
D623		DZN4148---	DIODE	1N4148 (AUTO)
IC501		1AN6359N--	IC	AN6359N
IC502		1MN6168KOA	IC	MN6168KOA
IC503		1AN6346N--	IC	AN6346N
IC504		1TA75902P-	IC	TA75902P
IC601		1MN1522DWA	IC	MN1522-0231
IC602		1MN4503B--	IC	MN4503B
IC603		1MN4503B--	IC	MN4503B
IC604		1TC4001BP--	IC	TC4001BP
IC605		1TA7288P--	IC	TA7288P
IC606		1PU4310---	IC	PU4310
IC607		1BAL872---	IC	BAL872
IC608		1AN6562---	IC	AN6562
JA001		97PA445100	AS RADIATOR SERVO	
IC505		1BA6411---	IC	BA6411
Q505		T2SD1275P-	TR	2SD1275-P
Q608		T2SB941Q--	TR	2SB941-Q
T001		97P4401500	RADIATOR SERVO LOGIC	SPCC T=1.0 SNMC

LOC	A/J	PART CODE	PART NAME	PART DESC
T002		7124300811	SCREW TAPPING	T2S RND 3×8 MFZN
T003		7124300811	SCREW TAPPING	T2S RND 3×8 MFZN
T004		7124300811	SCREW TAPPING	T2S RND 3×8 MFZN
T005		7124300811	SCREW TAPPING	T2S RND 3×8 MFZN
M501		97P2309000	HOLDER SER/LOGIC	NYLON 66
M502		97P2309000	HOLDER SER/LOGIC PCB	MYLON 66
P501		97P62119WH	CONN WAFER	W-P0802-51 2P WHITE
P503		97P62131WH	CONN WAFER	W-P0814-51 14P WHITE
P504		97P62119RD	CONN WAFER	W-P0802-52 2P RED
P505		97P62121RD	CONN WAFER	W-P0804-52 4P RED
P506		97P62122RD	CONN WAFER	W-P0805-52 5P RED
P601		97P62126WH	CONN WAFER	W-P0809-51 9P WHITE
P602		97P62125WH	CONN WAFER	W-P0808-51 8P WHITE
P603		97P62119GR	CONN WAFER	W-P0802-55 2P GREEN
P604		97P62123WH	CONN WAFER	W-P0806-51 6P WHITE
P605		97P62126RD	CONN WAFER	W-P0809-52 9P RED
P606		97P62125RD	CONN WAFER	W-P0808-52 8P RED
P607		97P62124GR	CONN WAFER	W-P0807-55 7P GREEN
P608		97P62124WH	CONN WAFER	W-P0807-51 7P WHITE
P609		97P62120RD	CONN WAFER	W-P0803-52 3P RED
P610		97P62121GR	CONN WAFER	W-P0804-55 4P GREEN
P611		97P62121WH	CONN WAFER	W-P0804-51 4P WHITE
P612		97P62120WH	CONN WAFER	W-P0803-51 3P WHITE
P613		97R6205100	CONNECTOR WAFER	IL-S-2P-S2T2-EF
P614		97P62122WH	CONN WAFER	W-P0805-51 5P WHITE
P615		97P62121BK	CONN WAFER	W-P0804-50 4P BLACK
Q503		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q504		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q506		TUN4213---	TR	UN4213
Q509		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q510		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q601		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q602		TZTC1814Y-	TR	KTC1815-Y (AUTO)
Q603		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q604		TUN4213---	TR	UN4213
Q605		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q606		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q607		TKTA966Y--	TR	KTA966-Y
Q609		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q610		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q611		TUN4213---	TR	UN4213
Q612		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q613		TUN4213---	TR	UN4213
Q614		TKTC1959Y-	TR	KTC1959-Y
Q616		TZTC1815Y-	TR	KTC1815-Y (AUTO)

LOC	A/J	PART CODE	PART NAME	PART DESC
Q617		TUn4213---	TR	UN4213
Q618		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q619		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q620		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q621		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q622		TZTC1015Y-	TR	KTA1015-Y (AUTO)
R501		RD-AZ154J-	R CARBON FILM	1/6 150K OHM J
R502		RD-AZ563J-	R CARBON FILM	1/6 56K OHM J
R503		RD-AZ274J-	R CARBON FILM	1/6 270K OHM J
R504		RD-AZ154J-	R CARBON FILM	1/6 150K OHM J
R505		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R506		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R507		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R508		RD-AZ683J-	R CARBON FILM	1/6 68K OHM J
R511		RV5417104M	R SEMI FIXED	100K OHM B H-TYPE
R512		RV5417104M	R SEMI FIXED	100K OHM B H-TYPE
R513		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R514		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R515		RV5417503M	R SEMI FIXED	50K OHM B H-TYPE
R516		RD-AZ181J-	R CARBON FILM	1/6 2.2K OHM J
R517		RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R518		RD-AZ154J-	R CARBON FILM	1/6 150K OHM J
R519		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R520		RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R521		RD-AZ124J-	R CARBON FILM	1/6 120K OHM J
R522		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R523		RD-AZ754J-	R CARBON FILM	1/6 750K OHM J
R524		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R525		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R526		RD-AZ362J-	R CARBON FILM	1/6 3.6K OHM J
R527		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R528		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R529		RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
R530		RD-AZ105J-	R CARBON FILM	1/6 1M OHM J
R531		RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
R532		RD-AZ275J-	R CARBON FILM	1/6 2.7M OHM J
R533		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R534		RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
R535		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R536		RD-AZ105J-	R CARBON FILM	1/6 1M OHM J
R537		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R538		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R539		RD-AZ153G-	R CARBON FILM	1/6 15K OHM G
R540		RD-8Z223G-	R CARBON FILM	1/8 22K OHM G
R541		RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R542		RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R543		RD-AZ124J-	R CARBON FILM	1/6 120K OHM J
R544		RD-8Z201G-	R CARBON FILM	1/8 200 OHM G
R545		RD-8Z103G-	R CARBON FILM	1/8 10K OHM G
R546		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R547		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R548		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R549		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R550		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R551		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R552		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R553		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R554		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R555		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R601		RD-AZ474J-	R CARBON FILM	1/6 470K OHM J
R602		RD-AZ183J-	R CARBON FILM	1/6 18K OHM J
R603		RS02H399JF	R M-OXIDE	2W 3.9 OHM J FLAME PROOF
R631		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R632		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R633		RD-2Z471J-	R CARBON FILM	1/2 470 OHM J
R634		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R635		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R636		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R637		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R638		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R639		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R640		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R641		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R642		RD-2Z221J-	R CARBON FILM	1/2 220 OHM J
R643		RD-2Z221J-	R CARBON FILM	1/2 220 OHM J
R644		RS01F109JF	R M-OXIDE	1W 1 OHM J FLAME PROOF
R645		RD-AZ154J-	R CARBON FILM	1/6 150K OHM J
R646		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R647		RD-AZ680J-	R CARBON FILM	1/6 68 OHM J
R648		RD-AZ471J-	R CARBON FILM	1/6 470 OHM J
R649		RV5217502M	R SEMI FIXED	5K OHM B V-TYPE
R650		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R652		RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R653		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R654		RS02H399JF	R M-OXIDE	2W 3.9 OHM J FLAME PROOF
R655		RD-AZ334J-	R CARBON FILM	1/6 330K OHM J
R656		RD-AZ334J-	R CARBON FILM	1/6 330K OHM J
R657		RD-AZ334J-	R CARBON FILM	1/6 330K OHM J
R658		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R659		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R660		RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R661		RD-AZ203J-	R CARBON FILM	1/6 20K OHM J
R662		RD-AZ622J-	R CARBON FILM	1/6 6.2K OHM J
R663		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R664		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R665		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R666		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R667		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R668		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R669		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R670		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R671		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R672		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R673		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R674		RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R675		RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R676		RD-4Z120J-	R CARBON FILM	1/4 12 OHM J
R677		RD-4Z150J-	R CARBON FILM	1/4 15 OHM J
R678		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R680		RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R681		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R682		RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R683		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R684		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R685		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R686		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R687		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R688		RD-AZ823J-	R CARBON FILM	1/6 82K OHM J
R689		RD-AZ623J-	R CARBON FILM	1/6 62K OHM J
R690		RD-AZ244J-	R CARBON FILM	1/6 240K OHM J
R692		RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R693		RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R694		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R695		RD-AZ824J-	R CARBON FILM	1/6 820K OHM J
R696		RD-AZ824J-	R CARBON FILM	1/6 820K OHM J
R697		RD-AZ753J-	R CARBON FILM	1/6 75K OHM J
R698		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R699		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
U511		97P6515601	PCB SERVO-LOGIC	248×150 T=1.6
X601		47P6000501	CRYSTAL	3.58MHZ APC
Z601		RA-86X333J	R ARRAY	RGSD 6×333J

6-2-3A Selector PCB Ass'y (30DAP I)

LOC	A/J	PART CODE	PART NAME	PART DESC
CA01		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA02		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA03		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA04		CCXF1H013Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA05		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA06		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA07		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA08		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA09		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA10		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA11		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA12		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA17		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA18		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
CA19		CCXB1H272K	C CERA	HIKB 50V 2700PF K TAPING
CA20		CCXB1H272K	C CERA	HIKB 50V 2700PF K TAPING
CA21		CMBM2A223J	C MYLAR	100V 0.022MF J
CA22		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA23		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA24		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA25		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C001		CXCH100C	C CERA	CH 50V 10 PF C TAPING

LOC	A/J	PART CODE	PART NAME	PART DESC
C002		CMBM2A153J	C MYLAR	100V 0.015MF J
C003		CMBM2A683J	C MYLAR	100V 0.068MF J
C004		CCXF1H102Z	C CERA	HIKF 50V 1000PF Z TAPING
C005		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
C006		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C007		CEXE1H100A	C ELECTRO	50V 10MF RS 5×11 TAPING
C008		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C009		CXCH1H560J	C CERA	CH 50V 56PF J TAPING
C010		CXSL1H270J	C CERA	SL 50V 27PF J TAPING
C011		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C012		CEXE1H470A	C ELECTRO	50V 47MF 8×11.5 RS TAPING
C013		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C014		CXSL1H470J	C CERA	SL 50V 47PF J TAPING
C015		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C016		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C017		CEBE1C101A	C ELECTRO	16V 100MF SM
C018		CEBE1H470A	C ELECTRO	50V 47MF SM
C019		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C025		CXSL1H270J	C CERA	SL 50V 27PF J TAPING
C026		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C027		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C028		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING

LOC	A/J	PART CODE	PART NAME	PART DESC
C030		CEXE1H100A	C ELECTRO	50V 10MF RS 5×11 TAPING
DA01		DZN4148---	DIODE	1N4148 (AUTO)
DA02		DZN4148---	DIODE	1N4148 (AUTO)
DA03		DZN4148---	DIODE	1N4148 (AUTO)
DA04		DZN4148---	DIODE	1N4148 (AUTO)
DA05		DZN4148---	DIODE	1N4148 (AUTO)
DA06		DZn4148---	DIODE	1N4148 (AUTO)
DA07		DZN4148---	DIODE	1N4148 (AUTO)
DA08		DZN4148---	DIODE	1N4148 (AUTO)
DA09		DZN4148---	DIODE	1N4148 (AUTO)
DA10		DZN4148---	DIODE	1N4148 (AUTO)
DA11		DZN4148---	DIODE	1N4148 (AUTO)
DA12		DZN4148---	DIODE	1N4148 (AUTO)
DA29		DZN4148---	DIODE	1N4148 (AUTO)
DA30		DZN4148---	DIODE	1N4148 (AUTO)
D001		DUPC574J--	DIODE ZENER	UPC574J
H001		97P7601300	TUNER VARACTOR	VTS-UKY2
ICA01		1LA7940---	IC	LA7940
IC001		1LA7530N--	IC	LA7530N
L001		56B608K002	COIL PIF	TRF-1019 0.6UH K
L002		56B109K034	COIL FIX	TRF-1510 (1 MH)
L003		56Z150J016	COIL PEAKING	TRF-4150J
L004		56E139K462	COIL AFT	TRF-1334
L005		56B139K463	COIL FIX PIF	TRF-1335
L006		56Z120J022	COIL PEAKING	TRF-4120J
L007		56Z330J032	COIL PEAKING	TRF-4330J
L008		56B998K464	PIF COIL	TRF-R99K
P001		97P62120WH	CONN WAFER	W-P0803-51 3P WHITE
P002		97P62121RD	CONN WAFER	W-P0804-52 4P RED
P003		97P62122WH	CONN WAFER	W-P0805-51 5P WHITE
P004		97P62123WH	CONN WAFER	W-P0806-51 6P WHITE
P005		97P62123WH	CONN WAFER	W-P0806-51 6P WHITE
P006		97P62120RD	CONN WAFER	W-P0803-52 3P RED
QA01		TZTC1815Y-	TR	KTC1815-Y (AUTO)
QA02		TZTC1815Y-	TR	KTC1815-Y (AUTO)
QA03		TZTC1015Y-	TR	KTA1015-Y (AUTO)
QA04		TZTC1815Y-	TR	KTC1815-Y (AUTO)
QA05		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q001		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q002		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q003		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q007		TZTC388A--	TR	KTC388A TM. FA (AUTO)
RA01		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA02		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA03		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA04		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA05		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
RA06		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA07		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA08		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA09		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA10		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA11		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA12		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA17		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA18		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
RA19		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
RA20		RD-4Z153J-	R CARBON FILM	1/4 15K OHM J
RA21		RD-4Z683J-	R CARBON FILM	1/4 68K OHM J
RA22		RD-4Z103J-	R CARBON FILM	1/4 10K OHM J
RA23		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
RA24		RD-4Z153J-	R CARBON FILM	1/4 15K OHM J
RA25		RD-4Z154J-	R CARBON FILM	1/4 150K OHM J
RA26		RD-4Z124J-	R CARBON FILM	1/4 120K OHM J
RA27		RD-4Z511J-	R CARBON FILM	1/4 510 OHM J
RA28		RD-4Z123J-	R CARBON FILM	1/4 12K OHM J
RA29		RD-4Z243J-	R CARBON FILM	1/4 24K OHM J
RA30		RD-4Z563J-	R CARBON FILM	1/4 56K OHM J
RA31		RD-4Z243J-	R CARBON FILM	1/4 24K OHM J
RA32		RD-4Z104J-	R CARBON FILM	1/4 100K OHM J
RA33		RD-4Z333J-	R CARBON FILM	1/4 33K OHM J
RA34		RD-4Z513J-	R CARBON FILM	1/4 51K OHM J
RA35		RD-4Z203J-	R CARBON FILM	1/4 20K OHM J
RA36		RD-4Z333J-	R CARBON FILM	1/4 33K OHM J
RA37		RD-4Z513J-	R CARBON FILM	1/4 51K OHM J
RA38		RD-4Z203J-	R CARBON FILM	1/4 20K OHM J
RA39		5V4203399B	POTENTIO METER	FT062N-14
RA40		5V4203398B	POTENTIO METER	FT062N-15
R001		RD-4Z471J-	R CARBON FILM	1/4 470 OHM J
R002		RD-4Z271J-	R CARBON FILM	1/4 270 OHM J
R003		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R004		RD-4Z182J-	R CARBON FILM	1/4 1.8K OHM J
R005		RD-4Z182J-	R CARBON FILM	1/4 1.8K OHM J
R006		RV5417103M	R SEMI FIXED	10K OHM B H-TYPE
R008		RD-4Z561J-	R CARBON FILM	1/4 560 OHM J
R009		RD-4Z124J-	R CARBON FILM	1/4 120K OHM J
R010		RD-4Z104J-	R CARBON FILM	1/4 100K OHM J
R011		RD-4Z392J-	R CARBON FILM	1/4 3.9K OHM J
R012		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R013		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R014		RD-4Z221J-	R CARBON FILM	1/4 220 OHM J
R015		RD-4Z272J-	R CARBON FILM	1/4 2.7K OHM J
R016		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R017		RD-4Z621J-	R CARBON FILM	1/4 620 OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
R018		RD-4Z751J-	R CARBON FILM	1/4 750 OHM J
R019		RD-4Z201J-	R CARBON FILM	1/4 200 OHM J
R022		RD-4Z224J-	R CARBON FILM	1/4 220K OHM J
R023		RD-4Z474J-	R CARBON FILM	1/4 470K OHM J
R031		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
R032		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R033		RD-4Z2720J-	R CARBON FILM	1/4 27 OHM J
R034		RD 4Z221J-	R CARBON FILM	1/4 220 OHM J
R035		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R036		RD-4Z561J-	R CARBON FILM	1/4 560 OHM J
SA01		5S30202005	SW SLIDE	SSJ 622K

LOC	A/J	PART CODE	PART NAME	PART DESC
U011		97P6515602	PCB SELECTOR	220×159
Z001		5PF1034---	FILTER SAW	F1035
Z002		5PSFE60MB-	FILTER CERA	SFC 6.0MB
Z003		5PCDA60M02	FILTER CERA	CDA6.0MC26
Z004		5PTPS60MB-	FILTER CERA	TPS 6.0MB (EFC-S6ROME3)
00010		97P0401500	COVER SW SLIDE	PVC 0.3 BLK
00020		97P0405000	COVER PIF SHIELD	ET T=0.3
00030		97P0405100	CASE PIF SHIELD	ET T=0.3
00040		97P0904200	PLATE PIF SHIELD	ET T=0.3
00050		97P2309300	HOLDER CHANNEL SET	HI-PS BLK (HFH-400 VO)

6-2-3B Selector PCB Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
CA01		CCXF1H103Z	C CERA	HIKF 50V 0.1MF Z TAPING
CA02		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA03		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA04		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA05		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA06		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA07		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA08		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA09		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA10		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA11		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA12		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA17		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA18		CEXE1H478A	C ELECTRO	50V 0.47MF RS=5×11 TAPING
CA19		CCXB1H272K	C CERA	HIKB 50 2700PF K TAPING
CA20		CCXB1H272K	C CERA	HIKB 50V 2700PF K TAPING
CA21		CMBM2A223J	C MYLAR	100V 0.022MF J
CA22		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA23		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA24		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CA25		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C001		CXCH1H100C	C CERA	CH 50V 10PF C TAPING
C002		CMBM2A153J	C MYLAR	100V 0.015MF J
C003		CMBM2A683J	C MYLAR	100V 0.068MF J
C004		CCXF1H102Z	C CERA	HIKF 50V 1000PF Z TAPING
C005		CEXE1H478A	C ELECTRO	50V 4.7MF RS=5×11 TAPING
C006		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C007		CEXE1H100A	C ELECTRO	50V 10MF RS 5×11 TAPING
C008		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C009		CXCH1H560J	C CERA	CH 50V 56PF J TAPING
C010		CXSL1H270J	C CERA	SL 50V 27PF J TAPING
C011		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C012		CEXE1H470A	C ELECTRO	50V 47MF 8×11.5 RS TAPING
C013		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C014		CXSL1H470J	C CERA	SL 50V 47PF J TAPING
C015		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C016		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING

LOC	A/J	PART CODE	PART NAME	PART DESC
C017		CEBE1C101A	C ELECTRO	16V 100MF SM
C018		CEBE1H470A	C ELECTRO	50V 47MF SM
C019		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C025		CXSL1H270J	C CERA	SL 50V 27PF J TAPING
C026		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C027		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C028		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
C030		CEXE1H100A	C ELECTRO	50V 10MF RS 5×11 TAPING
DA01		DZN4148---	DIODE	1N4148 (AUTO)
DA02		DZN4148---	DIODE	1N4148 (AUTO)
DA03		DZN4148---	DIODE	1N4148 (AUTO)
DA04		DZN4148---	DIODE	1N4148 (AUTO)
DA05		DZN4148---	DIODE	1N4148 (AUTO)
DA06		DZN4148---	DIODE	1N4148 (AUTO)
DA07		DZN4148---	DIODE	1N4148 (AUTO)
DA08		DZN4148---	DIODE	1N4148 (AUTO)
DA09		DZN4148---	DIODE	1N4148 (AUTO)
DA10		DZN4148---	DIODE	1N4148 (AUTO)
DA11		DZN4148---	DIODE	1N4148 (AUTO)
DA12		DZN4148---	DIODE	1N4148 (AUTO)
DA15		DZN4148---	DIODE	1N4148 (AUTO)
DA16		DZN4148---	DIODE	1N4148 (AUTO)
DA17		DZN4148---	DIODE	1N4148 (AUTO)
DA18		DZN4148---	DIODE	1N4148 (AUTO)
DA19		DZN4148---	DIODE	1N4148 (AUTO)
DA20		DZN4148---	DIODE	1N4148 (AUTO)
DA21		DZN4148---	DIODE	1N4148 (AUTO)
DA22		DZN4148---	DIODE	1N4148 (AUTO)
DA23		DZN4148---	DIODE	1N4148 (AUTO)
DA24		DZN4148---	DIODE	1N4148 (AUTO)
DA25		DZN4148---	DIODE	1N4148 (AUTO)
DA26		DZN4148---	DIODE	1N4148 (AUTO)
DA29		DZN4148---	DIODE	1N4148 (AUTO)
DA30		DZN4148---	DIODE	1N4148 (AUTO)
D001		DUPC574J--	DIODE ZENER	UPC574J
H001		4859702630	TUNER VARACTOR	VTS-1CDHY2 (A3KG1CDHY2)
ICA01		1LA7940---	IC	LA7940

LOC	A/J	PART CODE	PART NAME	PART DESC
IC001		1LA7530N--	IC	LA753ON
L001		56B608K002	COIL PIF	TRF-1019 0.6UH K
L002		56B109K033	COIL PIF	TRF-1505
L003		56Z150J016	COIL PEAKING	TRF-4150J
L004		56E139K462	COIL AFT	TRF-1334
L005		56B139K463	COIL FIX PIF	TRF-1335
L006		56Z120J022	COIL PEAKING	TRF-4120J
L007		56Z270J039	COIL PEAKING	TRF-4270J
L008		56B998K464	PIF COIL	TRF-R99K
P001		97P62120WH	CONN WAFER	W-P0803-51 3P WHITE
P002		97P62121RD	CONN WAFER	W-P0804-52 4P RED
P003		97P62122WH	CONN WAFER	W-P0805-51 5P WHITE
P004		97P62123WH	CONN WAFER	W-P0806-51 6P WHITE
P005		97P62123WH	CONN WAFER	W-P0806-51 6P WHITE
P006		97P6212120RD	CONN WAFER	W-P0803-52 3P RED
QA01		TZTC1815Y-	TR	KTC1815-Y (AUTO)
QA02		TZTC1815Y-	TR	KTC1815-Y (AUTO)
QA03		TZTA1015Y-	TR	KTA1015-Y (AUTO)
QA04		TZTC1815Y-	TR	KTC1815-Y (AUTO)
QA05		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q001		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q002		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q003		TZTC1815Y-	TR	KTC1815-Y (AUTO)
Q004		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q005		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q006		TZTA1015Y-	TR	KTA1015-Y (AUTO)
Q007		TZTC388A--	TR	KTC388A TM. FA (AUTO)
RA01		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA02		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA03		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA04		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA05		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA06		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA07		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA08		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA09		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA10		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA11		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA12		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA17		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
RA18		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
RA19		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
RA20		RD-4Z153J-	R CARBON FILM	1/4 15K OHM J
RA21		RD-4Z683J-	R CARBON FILM	1/4 68K OHM J
RA22		RD-4Z103J-	R CARBON FILM	1/4W 10K OHM J
RA23		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
RA24		RD-4Z153J-	R CARBON FILM	1/4 15K OHM J
RA25		RD-4Z154J-	R CARBON FILM	1/4 150K OHM J
RA26		RD-4Z124J-	R CARBON FILM	1/4 120K OHM J
RA27		RD-4Z511J-	R CARBON FILM	1/4 510 OHM J
RA28		RD-4Z123J-	R CARBON FILM	1/4 12K OHM J
RA29		RD-4Z243J-	R CARBON FILM	1/4 24K OHM J
RA30		RD-4Z563J-	R CARBON FILM	1/4 56K OHM J
RA31		RD-4Z243J-	R CARBON FILM	1/4 24K OHM J
RA32		RD-4Z104J-	R CARBON FILM	1/4 100K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
RA33		RD-4Z333J-	R CARBON FILM	1/4 33K OHM J
RA34		RD-4Z513J-	R CARBON FILM	1/4 51K OHM J
RA35		RD-4Z203J-	R CARBON FILM	1/4 20K OHM J
RA36		RD-4Z333J-	R CARBON FILM	1/4 33K OHM J
RA37		RD-4Z513J-	R CARBON FILM	1/4 51K OHM J
RA38		RD-4Z203J-	R CARBON FILM	1/4 20K OHM J
RA39		5V4203394B	POTENTIO METER	20K OHM B EWELEG656B24
RA40		5V203397B	POTENTIO METER	20K OHM B EWELEG652B24
R001		RD-4Z471J-	R CARBON FILM	1/4 470 OHM J
R002		RD-4Z271J-	R CARBON FILM	1/4 270 OHM J
R003		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R004		RD-4Z182J-	R CARBON FILM	1/4 1.8K OHM J
R005		RD-4Z182J-	R CARBON FILM	1/4 1.8K OHM J
R006		RV5417103M	R SEMI FIXED	10K OHM B H-TYPE
R008		RD-4Z561J-	R CARBON FILM	1/4 560 OHM J
R009		RD-4Z124J-	R CARBON FILM	1/4 120K OHM J
R010		RD-4Z104J-	R CARBON FILM	1/4 100K OHM J
R011		RD-4Z392J-	R CARBON FILM	1/4 3.9K OHM J
R012		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R013		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R014		RD-4Z201J-	R CARBON FILM	1/4 200 OHM J
R015		RD-4Z272J-	R CARBON FILM	1/4 2.7K OHM J
R016		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R017		RD-4Z471J-	R CARBON FILM	1/4 470 OHM J
R018		RD-4Z681J-	R CARBON FILM	1/4 680 OHM J
R019		RD-4Z201J-	R CARBON FILM	1/4 200 OHM J
R022		RD-4Z224J-	R CARBON FILM	1/4 220K OHM J
R023		RD-4Z474J-	R CARBON FILM	1/4 470K OHM J
R024		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R025		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R026		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R031		RD-4Z101J-	R CARBON FILM	1/4 100 OHM J
R032		RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
R033		RD-4Z270J-	R CARBON FILM	1/4 27 OHM J
R034		RD-4Z221J-	R CARBON FILM	1/4 220 OHM J
R035		RD-4Z562J-	R CARBON FILM	1/4 5.6K OHM J
R036		RD-4Z471J-	R CARBON FILM	1/4 470 OHM J
SA01		5S30202005	SW SLIDE	SSJ 622K
U011		97P6515602	PCB SELECTOR	220×159
W347		97P8824100	CONN AS (#347)	VID-SER-SELEC (3P, 4P-7P)
H206		97P62148BK	CONN HOU.	W-A2203-10 3P BLACK
H208		97P62149GR	CONN HOU.	W-A2204-15 4P GREEN
H607		97P62152GR	CONN HOU.	W-A2207-15 7P GREEN
01		97P6216100	CONN TERMINAL	W-T0213-11
Z001		5PF1034---	FILTER SAW	F1034
Z002		5PSFE55MB-	FILTER CERA	SFE 5.5MB
Z003		5PCDA55MC2	FILTER CERA	CDA5. 5MC26
Z004		5PTS55MB-	FILTER CERA	TPS-5.5MB
00010		97P0401500	COVER SW SLIDE	PVC 0.3 BLK
00020		97P405000	COVER PIF SHIELD	ET T=0.3
00030		97P0405100	CASE PIF SHIELD	ET T=0.3
00040		97P0904200	PLATE PIF SHIELD	ET T=0.3
00050		97P2309300	HOLDER CHANNEL SET	HI-PS BLK (HFH-400 VO)

6-2-4A Timer PCB Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
AX01		97P2309200	HOLDER CHANNEL LED	HI=PS BLK (HFH-400 VO)
AX02		97P2309100	HOLDER TIMER GUIDE	PBT
AX03		97P2311300	HOLDER TIMER PCB	NYLON 66
AX04		97P2311300	HOLDER TIMER PCB	NYLON 66
AX05		97P0414000	CASE REMOCON SHIELD	ET T=0.4
AX06		97P0414100	COVER REMOCON SHIELD	ET T=0.4
AX07		97P0911500	PLATE REMOCON SHIELD	ET T=0.4
AX08		97P2307500	HOLDER PHOTO	ABS
CR01		CEXF1A470A	C ELECTRO	10V 47MF RSM
CR02		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CR03		CNBN1H682J	C M-POLYESTER	50V 0.0068MF J N-INDUCT
CR04		CEXF1A470A	C ELECTRO	10V 47MF RSM
CR05		CEXF1C479A	C ELECTRO	16V 4.7MF RSM
CR06		CEXF1C100A	C ELECTRO	16V 10MF RSM
CX01		CXCH1H309C	C CERA	CH 50V 3 PF C TAPING
CX02		CXCH1H809C	C CERA	CH 50V 8 PF C TAPING
CX03		CXCH1H300J	C CERA	CH 50V 30PF J TAPING
CX04		CXCH1H300J	C CERA	CH 50V 30PF J TAPING
DR01		DPD49P1---	DIODE PHOTO	PD49PI
DX01		DZN4148---	DIODE	1N4148 (AUTO)
DX02		DZN4148---	DIODE	1N4148 (AUTO)
DX03		DZN4148---	DIODE	1N4148 (AUTO)
DX04		DZN4148---	DIODE	1N4148 (AUTO)
DX05		DZN4148---	DIODE	1N4148 (AUTO)
DX09		DZN4148---	DIODE	1N4148 (AUTO)
DX10		DZN4148---	DIODE	1N4148 (AUTO)
DX11		DZN4148---	DIODE	1N4148 (AUTO)
DX12		DZN4148---	DIODE	1N4148 (AUTO)
DX13		DZN4148---	DIODE	1N4148 (AUTO)
DX14		DZN4148---	DIODE	1N4148 (AUTO)
DX15		DZN4148---	DIODE	1N4148 (AUTO)
DX16		DZN4148---	DIODE	1N4148 (AUTO)
DX17		DZN4148---	DIODE	1N4148 (AUTO)
DX18		DZN4148---	DIODE	1N4148 (AUTO)
DX19		DZN4148---	DIODE	1N4148 (AUTO)
DX21		DZN4148---	DIODE	1N4148 (AUTO)
DX22		DZN4148---	DIODE	1N4148 (AUTO)
DX23		DZN4148---	DIODE	1N4148 (AUTO)
DX24		DZN4148---	DIODE	1N4148 (AUTO)
DX25		DZN4148---	DIODE	1N4148 (AUTO)
DX26		DZN4148---	DIODE	1N4148 (AUTO)
DX28		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX29		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX30		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX31		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX32		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX33		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX35		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX36		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX37		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX38		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX39		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX40		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DX42		DZN4148---	DIODE	1N4148 (AUTO)
DX43		DZN4148---	DIODE	1N4148 (AUTO)
DX44		DZN4148---	DIODE	1N4148 (AUTO)
DX45		DZN4148---	DIODE	1N4148 (AUTO)
DX46		DZN4148---	DIODE	1N4148 (AUTO)
GX01		DCP2142---	DIGITRON	CP2142
ICR01		1BA6340---	IC	BA6340
ICX01		1MN15844--	IC	MN15844-0226
ICX02		1MN4071B--	IC	MN4071B
ICX03		1MN4011B--	IC	MN4011B
LR01		56X1100461	COIL VARIABLE	TRF-3066
PX01		97P62139WH	CONN WAFER	W-P0858-51 8P WHT V-TYPE
PX02		97P62145WH	CONN WAFER	W-P0864-51 14P WHI V-TYPE
QX01		TKTC3199Y-	TR	KTC-3199Y
RR01		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
RR02		RD-AZ304J-	R CARBON FILM	1/6 300K OHM J
RR03		RD-AZ220J-	R CARBON FILM	1/6 22 OHM J
RR04		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
RX02		RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
RX03		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX04		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX05		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX06		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX07		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX08		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX09		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
RX10		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
RX11		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
RX12		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
SX01		5SB0101046	SW TACT	EVQ-QSL04M
SX02		5SB0101046	SW TACT	EVQ-QSL04M
SX03		5SB0101046	SW TACT	EVQ-QSL04M
SX04		5SB0101046	SW TACT	EVQ-QSL04M

LOC	A/J	PART CODE	PART NAME	PART DESC
SX05		5SB0101046	SW TACT	EVQ-QSL04M
SX06		5SB0101046	SW TACT	EVQ-QSL04M
SX07		5SB0101046	SW TACT	EVQ-QSL04M
SX08		5SB0101046	SW TACT	EVQ-QSL04M
SX09		5SB0101046	SW TACT	EVQ-QSL04M
SX10		5SB0101046	SW TACT	EVQ-QSL04M
SX11		5SB0101046	SW TACT	EVQ-QSL04M

LOC	A/J	PART CODE	PART NAME	PART DESC
SX12		5SB0101046	SW TACT	EVQ-QSL04M
SX14		5SB0101046	SW TACT	EVQ-QSL04M
SX15		5SB0101046	SW TACT	EVQ-QSL04M
SX16		5SB0101046	SW TACT	EVQ-QSL04M
UX11		97P6514103	PCB TIMER	182×70 T=1.6
XX01		5PBE425S12	CRYSTAL	EYX-BE425S12
XX02		5PCF333S11	CRYSTAL	EYX-CF333S11

6-2-4B Timer PCB Ass'v (30DAP GAA)

LOC	A/J	PART CODE	PART NAME	PART DESC
CR01		CEXF1A470A	C ELECTRO	10V 47MF RSM
CR02		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
CR03		CMYC1H682J	C MYLAR	50V 0.0068MF J EUH
CR04		CEXF1A470A	C ELECTRO	10V 47MF RSM
CR05		CEXF1C479A	C ELECTRO	16V 4.7MF RSM
CR06		CEXF1C100A	C ELECTRO	16V 10MF RSM
CX01		CXSL1H101J	C CERA	SL 50V 100PF J TAPING
CX02		CXSL1H101J	C CERA	SL 50V 100PF J TAPING
CX03		CEXF1A470A	C ELECTRO	10V 47MF RSM
CX04		CCXF1H103Z	C CERA	HIKF 50V 0.01MF Z TAPING
DA01		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA02		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA03		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA04		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA05		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA06		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA07		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA08		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA09		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA10		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA11		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA12		DLN31GCPHL	LED	LN31GCPHL GREEN D=5.0
DA13		DZN4148---	DIODE	1N4148 (AUTO)
DA14		DZN4148---	DIODE	1N4148 (AUTO)
DA15		DZN4148---	DIODE	1N4148 (AUTO)
DA16		DZN4148---	DIODE	1N4148 (AUTO)
DA17		DZN4148---	DIODE	1N4148 (AUTO)
DA18		DZN4148---	DIODE	1N4148 (AUTO)
DA19		DZN4148---	DIODE	1N4148 (AUTO)
DA20		DZN4148---	DIODE	1N4148 (AUTO)
DA21		DZN4148---	DIODE	1N4148 (AUTO)
DA22		DZN4148---	DIODE	1N4148 (AUTO)
DA23		DZN4148---	DIODE	1N4148 (AUTO)
DA24		DZN4148---	DIODE	1N4148 (AUTO)

LOC	A/J	PART CODE	PART NAME	PART DESC
DR01		DPD49P1---	DIODE PHOTO	PD49PI
DX01		DZN4148---	DIODE	1N4148 (AUTO)
DX02		DZN4148---	DIODE	1N4148 (AUTO)
DX03		DZN4148---	DIODE	1N4148 (AUTO)
DX04		DZN4148---	DIODE	1N4148 (AUTO)
DX05		DZN4148---	DIODE	1N4148 (AUTO)
DX06		DZN4148---	DIODE	1N4148 (AUTO)
DX07		DZN4148---	DIODE	1N4148 (AUTO)
DX08		DZN4148---	DIODE	1N4148 (AUTO)
DX09		DZN4148---	DIODE	1N4148 (AUTO)
DX10		DZN4148---	DIODE	1N4148 (AUTO)
DX11		DZN4148---	DIODE	1N4148 (AUTO)
DX12		DZN4148---	DIODE	1N4148 (AUTO)
GX01		DCP2142---	DIGITRON	CP2142
ICR01		1BA6340---	IC	BA6340
ICX01		1LC6502D--	IC	LC6502D-0140
ICX02		1TC4016BP-	IC	TC4016BP
LR01		56X1100461	COIL VARIABLE	TRF-3066
PX01		97P62139WH	CONN WAFER	W-P0858-51 8P WHT V-TYPE
PX02		97P62145WH	CONN WAFER	W-P0864-51 14P WHT V-TYPE
QX01		TKTA1015Y-	TR	KTA 1015-Y
QX02		TKTC3199Y-	TR	KTC-3199Y
RR01		RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
RR02		RD-AZ304J-	R CARBON FILM	1/6 300K OHM J
RR03		RD-AZ220J-	R CARBON FILM	1/6 22 OHM J
RR04		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
RX01		RD-4Z302J-	R CARBON FILM	1/4 3K OHM J
RX02		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
RX03		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
RX04		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
RX05		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
RX06		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
RX07		RD-AZ105J-	R CARBON FILM	1/6 1M OHM J
RX09		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J

LOC	A/J	PART CODE	PART NAME	PART DESC
RX10		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
RX11		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
RX12		RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
RX13		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX14		RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RX15		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
RX16		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
RX17		RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
RX19		RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
SX01		5SB0101046	SW TACT	EVQ-QSL04M
SX03		5SB0101046	SW TACT	EVQ-QSL04M
SX04		5SB0101046	SW TACT	EVQ-QSL04M
SX05		5SB0101046	SW TACT	EVQ-QSL04M
SX06		5SB0101046	SW TACT	EVQ-QSL04M
SX07		5SB0101046	SW TACT	EVQ-QSL04M
SX08		5SB0101046	SW TACT	EVQ-QSL04M
SX09		5SB0101046	SW TACT	EVQ-QSL04M
SX10		5SB0101046	SW TACT	EVQ-QSL04M
SX11		5SB0101046	SW TACT	EVQ-QSL04M
UX11		97P6514902	PCB TIMER	182×70 T=1.6
PJA01		97P62166WH	CONN DIP	W-D3406 6P WHITE

LOC	A/J	PART CODE	PART NAME	PART DESC
PJA02		97P62168WH	CONN DIP	W-D3408 8P WHITE
PJA03		97P62164WH	CONN DIP	W-D3404 4P WHITE
XX01		5897100505	RESONATOR CERA	KBR-400B
ZX01		RA-88X333J	R ARRAY	RGSD 8X333J
ZX02		RA-88X33J	R ARRAY	RGSD 8X333J
0010		97P2309200 CHANNEL LED	HOLDER	HI-PS BLK (HFH-400 VO)
0020		97P0414000	CASE REMOCON' SHIELD	ET T=0.4
0030		97PA346800	REMOCON SH COVER AS	SWM D=0.2 MFZN SOLDERING
0031		97P0414100	COVER REMOCON SHIELD	ET T=0.4
0040		97P0911500	PLATE REMOCON SHIELD	ET T=0.4
0050		97P2311300	HOLDER TIMER PCB	NYLON 66
0060		97P2307500	HOLDER PHOTO	ABS
0070		97P2309100	HOLDER TIMER GUIDE	PBT

6-2-5 Logic-Control PCB Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
DL01		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL01A		97P2309600	HOLDER LAMP-L	ABS
DL02		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL02A		97P2309600	HOLDER LAMP-L	ABS
DL03		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL03A		97P2309600	HOLDER LAMP-L	ABS
DL04		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL04A		97P2309600	HOLDER LAMP-L	ABS
DL05		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL05A		97P2309600	HOLDER LAMP-L	ABS
DL06		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL06A		97P2309600	HOLDER LAMP-L	ABS
DL08		DDL11S2RN2	LED	DL-11S2RN2 D=3.0 RED
DL08A		97P2309400	HOLDER LAMP-L	ABS
DL09		DZN4148---	DIODE	1N4148 (AUTO)
DL10		DZN4148---	DIODE	1N4148 (AUTO)
DL11		DZN4148---	DIODE	1N4148 (AUTO)
DL12		DZN4148---	DIODE	1N4148 (AUTO)
DL13		DZN4148---	DIODE	1N4148 (AUTO)
DL14		DZN4148---	DIODE	1N4148 (AUTO)
DI15		DZN4148---	DIODE	1N4148 (AUTO)

LOC	A/J	PART CODE	PART NAME	PART DESC
PL01		07P62138WH	CONN WAFER	W-P0857-51 7P WHT V-TYP
PL02		07P62139WH	CONN WAFER	W-P0858-51 8P WHT V-TYP
PL03		07P62135WH	CONN WAFER	W-P0854-51 4P WHT V-TYP
PL01		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
RL02		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL03		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL04		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL05		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL06		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL07		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL09		RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
RL10		RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
SL01		5SB0101046	SW TACT	EVQ-QSL04M
SL02		5SB0101046	SW TACT	EVQ-QSL04M
SL03		5SB0101046	SW TACT	EVQ-QSL04M
SL04		5SB0101046	SW TACT	EVQ-QSL04M
SL05		5SB0101046	SW TACT	EVQ-QSL04M
SL06		5SB0101046	SW TACT	EVQ-QSL04M
SL07		5SB0101046	SW TACT	EVQ-QSL04M
SL08		5SB0101046	SW TACT	EVQ-QSL04M
UX12		97P6515604	PCB LOGIC CONTROL	220×55 T=1.6

6-2-6 E.T Part Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
EJ01		97P6302500	COD. JACK PHONE (FEM.)	
ER01		RD-AZ220J-	R CARBON FILM	1/6 22 QHM J
E001		97PA446900	POWER DRIVE AS	TRANS-RADIATOR-PW DRIVE
001		57PB068039	POWER TRANSFORMER	TPW-30DAP
002		97PA339400	BOARD POWER DRIVE AS	VCR-50DAU
CJ801		CCBF1H473Z	C CERA	HIKF 50V 0.047MF Z
CJ802		CCBF1H473Z	C CERA	HIKF 50V 0.047MF Z
CJ803		CCBF1H473Z	C CERA	HIKF 50V 0.047MF Z
Q615		T2SD12650-	TR	2SD1265-O
Q801		T2SD1275P-	TR	2SD1275-P
Q803		T2SD12650-	TR	2SD1265-O
Q807		T2SD1273P-	TR	2SD1273-P
U813		97P6514114	PCB POWER DRIVE	60×17 T=1.6
003		97P4401900	RADIATOR POWER TRANS	AL

LOC	A/J	PART CODE	PART NAME	PART DESC
001		7274300611	SCREW TAPITE	TT3 RND 3×6 MFZN
E002		2193011600	SOLDER WIRE	50 SNS
E003		2193213500	SOLDER BAR	SN PB=60 40
E004		2219090001	HEAT SINKER	HSC 100 SILICON GREASE
E005		2291050606	FLUX	JLH N0207
E006		2291050701	FLUX TABLET	802 THINNER
E007		2291050801	FLUX SOLVENT	802 THINNER
E008		2291140601	WAX MICRO	
E009		97P8819400	CONNECTOR AS	GP870192
TS01		592MVP01--	TAPE TEST	COLOR BAR, Y N AUDIO LEV
TS02		592MVP02--	TAPE TEST	STAIRSTEPS, PATH ADJ.
TS03		592MVP03--	TAPE TEST	RF FREQ ADJ.
TS04		592MVP04--	TAPE TEST	CROSS HATCH
TS05		592MVP05--	TAPE TEST	WOW FLUTTER CONT
TS06		592MVP06--	TAPE TEST	MONOSCOPE, RESOLUTION
TS10		592T120---	TAPE EAMP	T-120 (SK)
TS11		592T1201--	TAPE EAMP	T-120 (STANDARD BLANK)
UN01		97P6515607	PCB UNION-1	SERVO-LOGICON 247×206
UN02		97P6515608	PCB UNION-2	SEL-PWD 250×160

6-2-7 Transmitter Ass'y

LOC	A/J	PART CODE	PART NAME	PART DESC
CT01		CCBB1H101K	C CERA	HIKB 50V 100PF K
CT02		CCBB1H101K	C CERA	HIKB 50V 100PF K
CT03		CEBE1A470A	C ELECTRO	10V 47MF SM
DT01		DGL522---	IR LED	GL522
DT02		DGL522---	IR LED	GL522
DT03		DKLR124E--	LED	KLR124E
IT01		1BU3703F-	IC	BU 3703F

LOC	A/J	PART CODE	PART NAME	PART DESC
QT01		T2SC2710Y-	TR	2SC2710Y-
RT01		RD-AZ209J-	R CARBON FILM	1/6 2 OHM J
RT02		RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
UY41		97P6514116	PCB TRANSMITTER	VCR-500DAU (110×120)
ZT01		97P0A00010	RESONATOR CERA	CSB-455EB